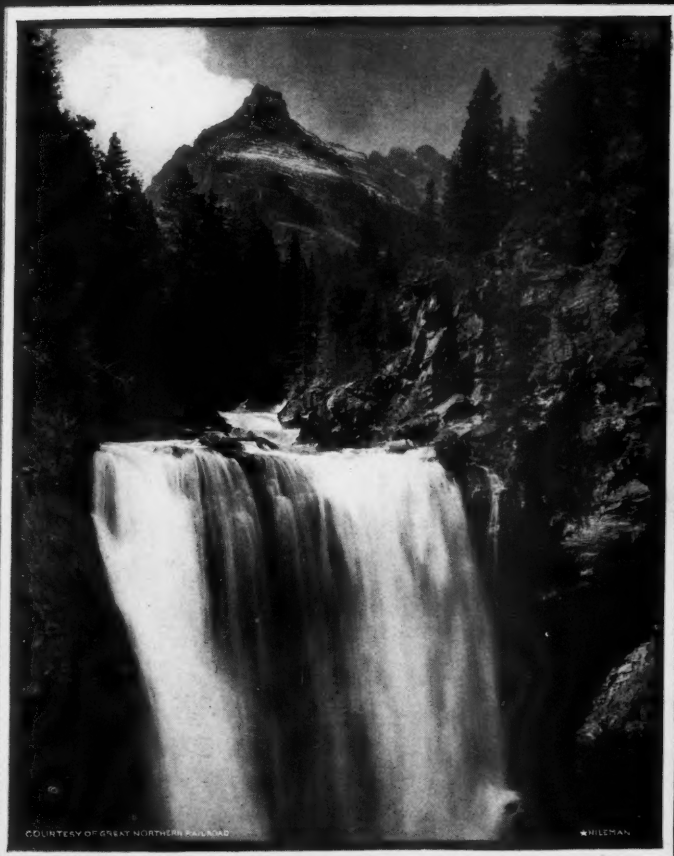


# THE DENTAL DIGEST



**SEPTEMBER - 1925**

VOL. XXXI, NO. 9

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GEORGE WOOD CLAPP, D.D.S.  
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# Integrity

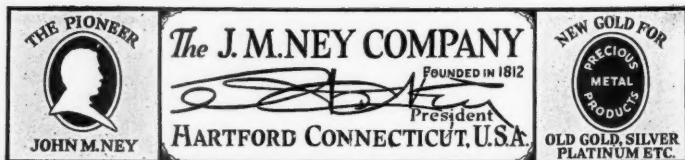
THE future of dentistry—including the dental laboratory—depends upon the service it renders to humanity. Inferior materials, like inferior workmanship, is professional disloyalty.

Every dentist, when he sends his work to a laboratory, should specify the gold he wants used. The better laboratories will welcome this specification.

These observations are made necessary by the following facts:

1. Cheap solders often contain cadmium, which eats into the gold plate of abutment crowns, causing them to break. Solder as low as 585 fine is often sold for "18k. solder."
2. Cheap plate is often lower than 21k. fine, is poorly alloyed, causing crowns to discolor and sometimes to break.
3. Cheap casting golds frequently contain excessive quantities of copper, which is injurious to the tissues. They are porous and contain minute pits, the breeding places for bacteria.
4. Some of the casting golds that are recommended for one-piece partial dentures contain nickel. They discolor rapidly because they are less than 16k. fine, with no platinum to offset the low gold content.

*Specify Ney's Golds—  
At least specify good golds*



# CONTENTS

VOL. XXXI

SEPTEMBER, 1925

No. 9

## CONTRIBUTED ARTICLES

	PAGE
Fundamentals in Dental Articulation . . . . .	M. M. HOUSE, D.D.S. 593
The Relation of Nutrition to Preventive Dentistry, . . . . .	ROBERT H. ROSE, A.B., M.D. 596
Care of Children's Teeth . . . . .	W. C. MCBRIDE, D.D.S. 601
Correction . . . . .	606
The Principles and Practice of Administering Nitrous Oxide-Oxygen and Ethylene-Oxygen . . . . .	607
The Great Ether Mystery . . . . .	612
Robert Wooffendale . . . . .	H. H. MANCHESTER 613
Dental Health Talks . . . . .	618
The Oral Diagnosis of Systemic Disturbances, Wm. G. Downs, Jr., D.D.S. . . . .	619
Causing Mastication to Tighten Loose Teeth . . . . .	G. P. PHILLIPS, D.M.D. 623
Togo's Discursions . . . . .	624
New York University Establishes New Half Million Dollar College of Dentistry . . . . .	626
Paul Revere's Horse . . . . .	JULIUS L. BISCHOF, D.D.S. 627
The Status of Dental Education . . . . .	628
December, 1925, Meeting of the First District Dental Society, New York . . . . .	632
World Conference on Narcotic Education . . . . .	633
Dental Laws . . . . .	ALPHONSO IRWIN, D.D.S. 634
DENTAL ECONOMICS . . . . .	639
PRACTICAL HINTS . . . . .	641
CORRESPONDENCE . . . . .	645
DENTAL LABORATORIES . . . . .	648
DENTAL SECRETARIES AND ASSISTANTS . . . . .	649
EXTRACTIONS . . . . .	661
DIETETICS AND HEALTH . . . . .	662
FUTURE EVENTS . . . . .	664



# THE DENTAL DIGEST

GEORGE WOOD CLAPP, D.D.S., EDITOR

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## OUR COVER THIS MONTH

Our cover picture this month is located in the Many Glacier Region of Glacier National Park. It is a place where, to your hearts content, you may be on and about the water. Down from the melting glaciers mighty cataracts tumble to form hurrying rivers—rushing, sparkling and foaming. These rivers feed mile-high lakes, and through these lakes rivers go swiftly on again down to the plains. The lakes alone are surprisingly interesting, and there are two hundred and fifty of them within the limits of the Park. There is no other locality as sublime as this. Glacier National Park has been pronounced by world travelers—competent judges of scenic values—to excel in beauty the most noted scenic portions of the old world. As a park and tourists' haven it is quite new, of course, but geologically it is a very old region. Our picture is one of the wonder spots of the Park, and is known as Dawn Mist Falls.

# We are doing our part

Every Dentist knows the frightful toll in lost teeth and broken health that Pyorrhea exacts every year.

Every Dentist worthy of the name is doing what he can to reduce the number of victims and to lessen the effects of this dreaded disease.

Before any noticeable improvement can be made, however, the public must be awakened to the need of better oral care—to the necessity for regular tooth and gum inspection by competent Dentists, as well as to everyday measures of precaution.

It is to such a campaign of education that we have dedicated our efforts in the advertising of Forhan's For the Gums.

We are proud to be allied with the dental profession in such a worthy undertaking.

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# Forhan's

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## FOR THE GUMS

*Forhan's Pyorrhea Astringent is a recognized healing adjunct in the treatment of Pyorrhetic conditions. Its use is restricted solely to dentists. Order through your dental supply house.*





# THE DENTAL DIGEST

Vol. XXXI

SEPTEMBER, 1925

No. 9

## Fundamentals in Dental Articulation

By M. M. House, D.D.S., Kansas City, Mo.

Much of the discussion which has taken place among workers in that portion of the prosthetic field which is devoted to the making of artificial dentures has arisen because the fact has not been sufficiently appreciated that, in the human body, any considerable change in the form of bones and muscles causes a change in function, and that any persistent change in function causes a change in the forms of the bones and muscles which take part in that function. During what we call "early life," while the body is being shaped to its mature state, such changes in form and function are often constructive in character. But there comes an age when the constructive force seems to be spent. All the strength is required to resist the retrograde changes which, in some cases, appear early in middle life. While the power of repair injuries is still great, it is not sufficient to carry any part which has suffered retrograde change back to its original form. From middle life onward, the changes which occur are usually destructive in character, as the wearing away of the cusps of the teeth and the changes of form in the articulating surfaces of the eminentiae articulares and the condyles.

In early life, before the teeth are much worn, the lateral excursions of the mandible are usually very limited. The mandible does not need to travel far laterally because the teeth are *sharp*. A number of studies of habitual mandibular movements in persons of different ages seem to show that in young persons, before the teeth are worn, the excursion of the mandible exhibits a good deal of the vertical element, and the horizontal element is limited. As age advances and the cusps of the teeth become worn, the vertical element in this lateral movement gradually decreases and the horizontal movement gradually increases about in proportion as the vertical element is lost.

Any change in form in one part of the body which results in any important change in function will, eventually, result in such changes of form in other parts of the body involved in that function as permit the function to be continued. At the time in life when the natural teeth have not yet become worn, the fossae are deep and the condyle heads are well rounded. It is at this time that the vertical element in the lateral excursion of the mandible is large in proportion to the horizontal element. With the passing of the years, the cusps of the teeth

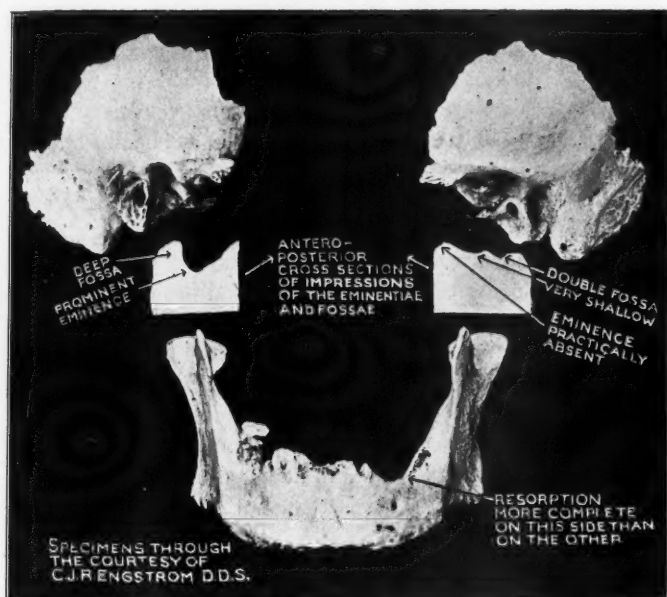
may become very much worn, especially in people of robust habits and those who habitually use rough food or food containing any form of grit, e. g., tobacco-chewers. As the cusps of the teeth are worn down so that the occlusal surfaces become more nearly horizontal, the excursion of the mandible will change in character by a decrease in the vertical element and an increase in the horizontal element. A corresponding change of form will occur in the temporomandibular articulation by which the fossae will become more shallow and the condyles will become flatter.

The character of the change in the form of the teeth, the character of the lateral excursion and the form of the articulating parts of the temporomandibular joint will be affected by the degree of overbite. Persons who, in early life, have exhibited only a moderate degree of overbite often exhibit an end-to-end bite in later life because the occlusal surfaces of the teeth have been worn to nearly horizontal arcs and the mandible has moved forward. Persons who, in early life, have exhibited more than a moderate degree of overbite usually wear the mandibular buccal cusps more than the lingual cusps, and the worn cusps will be so inclined as to force the excursion of the mandible to retain a considerable proportion of the vertical element. It is probable that most people never have more than a moderate degree of overbite and that more people wear their teeth to present nearly horizontal arcs than to exhibit steep buccal inclines on the mandibular teeth. This estimate does not include persons in whom the depth of overbite has been increased by loss of the posterior teeth.

Happily, the practice on the part of discriminating patients of consulting prosthodontists before the natural teeth are lost is increasing, but in most cases the dentist who is to make artificial dentures does not see the patient until the majority of the posterior teeth have been lost. Whenever such a patient presents, the dentist places himself, at the very beginning of treatment, in one of two distinct groups of workers. One group disregards all of the changes which have taken place in the forms of the natural teeth, in mandibular functions and in the articulating joint. These workers believe that the cusp forms of the teeth and the way in which the teeth are arranged control the movements of the mandible and that they may safely arrange artificial teeth by an arbitrary technic without regard to what the habitual movements of the individual patient may have been. They believe that by such a technic they can establish an ideal function which will result in comfortable and efficient mastication. Long experience and extended observation clearly demonstrate that the efforts to establish ideal function without regard to asymmetries of horizontal movement, which may have developed in the individual and been continuous for years, result in continuous cuspal interference between the maxillary and mandibular artificial teeth which cannot be corrected without extensive grinding

away of the cusps. This interference, unless relieved, causes continuous soreness of the soft tissue and destructive changes in the underlying bony structure. In an unsuspectedly large percentage of cases interference of this character accounts for the continual grinding of teeth and frequent rebasing of dentures, which are resorted to in the search for relief.

The other group of dentists attaches a very high value to the changes of the forms of the teeth which occur in patients prior to the making of artificial dentures, to the changes in function which result from



the changes in tooth forms and to the changes in the articulating joint which result from changes in tooth forms and in function. They believe in recording the mandibular movements habitual to the patient, in diagnosing the character of those movements and in arranging the teeth in such way as to reestablish proper facial dimensions and the cuspal interdigitation and coordination necessitated by the mandibular movements habitual and peculiar to that person. Experience and observation show that arrangement of the teeth in this manner obviates the necessity for extensive grinding away of the cusps and frequent fitting of the denture, and reduces the soreness of the soft tissues and the destruction of the underlying bony tissues to a minimum.

Deaner Institute.

## The Relation of Nutrition to Preventive Dentistry\*

By Robert H. Rose, A.B., M.D., New York, N. Y.

Instructor, New York Post-Graduate Medical School; Associate, Pyorrhea Clinic, Dept. of Stomatology, Midtown Hospital.

That there is an important relation between nutrition and both the development of the teeth and their later condition is undoubtedly accepted by the dental profession. I believe, however, that this is not emphasizing the case strongly enough. This statement contains only a fraction of the truth. I believe that health is a normal condition of the human body, that good teeth are a part of health and, therefore, that good teeth, practically perfect, regular, articulating well and set in well-developed jaws, are a part of this normal condition. I believe that proper nutrition is the first requisite to good teeth. There can be no good teeth unless the elements from which teeth are formed are present in the dietary in sufficient amount, including Vitamin D and others, as well as the minerals, especially calcium and phosphorus. I do not maintain that there are not other factors, but I believe that nutrition is the most important of all. Without proper nutrition other factors concerned with good teeth, such as hygiene and the mechanical treatment of them, are only palliative. When good health and nutrition are present, hygiene and mechanical treatment of teeth are not necessary (races which have had a predominance of perfect teeth have not always resorted to such measures). Sometimes we ascribe an interruption in development of the teeth to illness, such as scarlet or typhoid fever. Perhaps the explanation is that, during the time the fever is running its course, the patient does not consume a sufficiency of the nutritive principles necessary for the sustenance of the teeth, and even there it is really due to faulty nutrition after all.

The human race has been in existence for hundreds of thousands of years and during all this time it has managed to nourish itself in a way. However, such success as it has attained has been more through good luck than good management. In some races the nutritive condition has been almost perfect, while in others, no less favorably envired, it has been very bad. Only in recent years have we accumulated enough knowledge on the subject of dietetics to enable us to select an approximately correct dietary. Much must still be learned before the last word on the subject can be given. I do not presume, therefore, to present the subject in its entirety, but there are many interesting facts, some of which I offer for your consideration.

\* Read before the New York Stomatological Society at its annual meeting in cooperation with the Allied Dental Council, New York, N. Y., June, 1924.

The practice of medicine was first confined, largely, to the treatment of disease, but for many years preventive medicine has been becoming of greater and greater importance. The former is only palliative. The effects of the latter are far-reaching and more to be desired. For example, twenty years ago we cured from eighty to ninety-five per cent of our typhoid cases. Now we prevent from ninety-five to ninety-nine per cent of them from even starting, and what cases do occur are very mild. Preventive medicine is the true ideal of the physician.

The practice of dentistry was first concerned with the treatment of the teeth and attachments. But the eras of preventive dentistry and of stomatology have followed. Work can be done in dentistry comparable to that which has been done in medicine. As to the relation of nutrition to dentistry, in this connection it might be said that dentistry is a special branch of medicine which is particularly related to nutrition. The field of nutrition holds out the greatest opportunity for those interested in preventive dentistry.

The effects of dietary control are seen in both curative and preventive dentistry. A scorbutic diet causes bleeding of the gums and loose teeth. An antiscorbutic diet cures this condition. A diet producing rickets causes caries. The opposite cures or stops the process.

There is also an indirect relation between diet and the condition of the teeth. For example, an improper diet may produce hyperchlorhydria, infection of the gall bladder and intestinal stasis, and dentists have long recognized the effects of these on the teeth.

Teeth have, on the other hand, their effect upon the health in general. As part of focal infection, they rank with the tonsils, upon which King has laid such stress, curing cases of rheumatism, Bright's disease and heart disease by the eradication of this source of focal infection. They are one of the three "T's" of Bell (teeth, tonsils and toxins of the intestines). Dr. Bell has shown the relation between toxins from the gastro-intestinal tract and such diseases as ulcers of the eye, glaucoma and retinitis. He recognizes the baneful effects of the modern tendency to use sweets in excessive amounts. He also calls attention to the fact that combinations of concentrated carbohydrates with concentrated proteins are particularly inclined to produce toxins. I have found this to be the case in patients suffering from hyperchlorhydria. When it is recognized that most of those having stomach trouble suffer from hyperchlorhydria, the significance of this point may readily be seen. Dr. Norman has made a study of the intestinal factor and of diet in this relation. He has frequently successfully normalized the intestinal flora by colonic irrigations and implantations of cultures. He has, however, come to the conclusion that only through right eating can this desirable state be maintained.

That good teeth are normal I think no one can deny when presented with the following facts. E. A. Hooton contributed to the *American Journal of Physical Anthropology*, 1918, Vol. 1, page 53, an article entitled *On Certain Eskmoidic Characteristics in Icelandic Skulls*. He examined ninety-six skulls from the Peabody Museum, which were exhumed by Stefansson, these being from inhabitants of Iceland who lived in the ninth to the thirteenth centuries. He reports no decayed teeth. On page 320 of McCollum's book, *The Newer Knowledge of Nutrition*, Second Edition, Revised, he states that skulls of several hundred Indians of two hundred to three hundred years ago in the National Museum at Washington were examined and all teeth found perfect with the exception of a few which had been broken off. I consider that this shows a possibility for similar teeth today. It is evidence, taken together with recent experimental work, that we are not properly nourished because we fail to have similar teeth. If you have a dog which is in good health, examine his teeth. You will find no caries there. Why not? Has nature been more kind to him than to you? No. You give your dog what is best for him to eat, but feed yourself what you know is harmful. Today nations whose diets consist of green foods, fruits and milk products in much larger amounts than do ours have better teeth than we have. If good teeth were ever possible, they are possible now. If they are possible in some countries, they are possible here. If they are possible for the dog, they are possible for the human animal. Herbert Spencer says: "To attain the highest development, a man must first of all become a good animal. He has improved his domestic animals, made them much larger and better specimens, but has allowed himself to degenerate." The gorilla has good teeth, being still on his original diet.

The bones and the teeth are labile tissues. Quoting from McCarri-son: "Zilva and Wells, experimenting with guinea pigs, concluded that the tooth was one of the first parts, if not the first part, of the system to be affected by deficiency of antiscorbutic vitamin within the diet and, even when scorbutic symptoms during life were so slight as to be almost unrecognizable, profound changes in the teeth may have occurred."

May Mellanby has established a similar relation between rickets and defective teeth. Associated with the lack of fat soluble vitamin is failure of the development of bone, cartilage and teeth.

It is from food taken into the body that its tissues are formed. The necessary elements must all be present in the food, and they must be present in abundance. As soon as the baby is able to chew, he must be given food in a form which will require chewing. The teeth must be used and the muscles of the jaws must be given a chance to develop through exercise. Milk, greens, coarse vegetables and fruits are needed.



Animals which live on meat must have bones to furnish them with lime. Since man does not get his lime from bone, he must have other sources from which to obtain it. Milk and cheese furnish this element in greater quantity than any others. Next come fruits and green vegetables. Whole grains contain more of it than white flour and white cereals.

An examination of a large majority of the twenty million school children in the United States has shown that fifty to seventy-five per cent have defective teeth and that fifteen to twenty-five per cent suffer from malnutrition. If these defects were confined to the poor, it would not be such a reflection upon our conception of how to nourish the nation, but the rich suffer about the same as the poor. Though their purses are well filled, their neglect, ignorance or unwillingness to follow correct eating prevents their reaping, in this respect, the advantage of their position in life.

The teeth are about eighty-five per cent earthy matter, chiefly phosphate and carbonate of lime. This is similar to the composition of bone. During pregnancy a mother must eat more lime than at other times in order to furnish enough for the child's bones; otherwise the lime would be drawn from her own tissues. Frequently the mother's teeth suffer very much at such a time.

It has been shown that the blood will draw upon the lime of bones and teeth, if too small an amount is supplied in the food. The right remedy is a dietary abundant in lime, vitamins and minerals. One glass of milk daily, along with a salad and some raw fruit, in addition to a diet which was correct before conception took place, is all that is necessary in a dietary way to carry the mother through without change in the teeth.

The proper development of the teeth and their maintenance in good condition are, therefore, like the development and maintenance of other parts of the body, dependent upon correct eating.

In the *Journal of the American Medical Association* for November, 1922, occurred three articles to which I will refer. Clarence J. Grieves, D.D.S., says, "There are three facts concerned in the development of the teeth, fat soluble vitamin, calcium and phosphorus." If all of these are in optimal amounts in the diet, there is no caries. But in a diet that is a rickets-producing diet with a low-vitamin content, caries is produced, as well as disease of the attaching tissues.

P. G. Shipley, M.D., in an article, *Faulty Diet and Its Relation to the Structure of Bone*, concluded that bone is one of the most labile of the body's tissues and most easily and profoundly influenced by changes in the diet. His statements are similar to those of Grieves, both having gone much more into detail than I have stated.

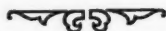
Percy R. Howe, D.D.S., of the Forsyth Dental Infirmary, also calls attention to the similarity of the teeth and bone. He states that



"eighty-five per cent of the bone and dentin is calcium phosphate and from ten to twelve per cent calcium carbonate. The density of the dentine cartilage is about equal to that of bone. The processes of calcification are analogous. Twenty guinea pigs on a diet to which were added large amounts of sugars, viz., dextrose, levulose, lactose, saccharin, dextrin and white flour, showed no dental effects at the end of a year. Bacteriological examination showed a fermentative flora, but no dental defects could be detected. Guinea pigs fed on a diet producing scorbutis in fourteen weeks were extensively decalcified. The alveolar process was gone. The teeth were elongated and loose. The periodontal tissue showed a series of changes which ranged from a hemorrhagic condition to one with pus formation with disintegration. In young animals, on the fifteenth day, the joints were so affected that walking became difficult. They were swollen and painful with hemorrhagic areas. The animals had eaten well and gained in weight. After a few days of orange juice treatment this condition disappeared. In the older animals the same trouble occurred after a longer time. If they are kept in a latent scorbutic condition for months, the femur and tibia decalcify and can be pulled apart easily at the epiphyseal line. When these animals are fed sufficient antiscorbutic food, calcification recurs with large areas of newly forming bone on jaws as well as the long bones. One effect likewise noticeable was that pregnant mothers with slight scorbutic symptoms had in a number of instances offspring with absent eyes, with only one eye or only one good eye. Many were born with spots on the outer coating of the eye, which cleared up with proper feeding. In the animals on scorbutic diet, eye trouble followed even up to a pussy discharge. Feeding by orange juice is followed by complete clearing of this trouble. A similar diet when fed to monkeys produced marked joint disturbances. In two out of four a condition resembling arthritis deformans occurred. The knee joints enlarged to twice the normal size. The spinal column curved and the animal assumed a coiled-up posture, holding the head down. The mouth became filthy. Excessive tartar formed and loose teeth. Exophthalmus, hemorrhagic areas in the supraorbital region, blood trickling from the eyes and mouth and temporary blindness occurred. Orange juice quickly cleared up the entire condition unless the lens had become affected, where cataract resulted."

40 East 41st Street.

(To be continued)



## Care of Children's Teeth

By W. C. McBride, D.D.S., Detroit, Mich.

The major portion of the literature on children's work deals entirely with diet, prophylaxis and the management of the child during treatment. I shall endeavor to present more of the operative side in this paper. Initially, though, I would say a word regarding the management of the child.

In dealing with children it is necessary to establish a real friendship—call it confidence, if you will—and in doing that one must do a great deal of explaining at the first sitting. This will take additional time, but it is time and energy well spent. The demeanor of a child in later sittings will compensate doubly for the extra time and explanation at the first call. It is natural that one should be truthful with little folks. One cannot prevaricate to children and expect to get along well with them. One cannot force them to anything and hold their esteem. After all, the child is but an immatured grown-up. He has the same doubts and fears and questionings, and he carries the same ill-will in cases of deceit and in an accentuated form. Put the little fellow on your own basis. In other words, bring him to your level and you will find him a splendid patient.

What one actually does at the chair with timid or frightened or obstinate children would look eccentric in print. These things have to be learned from experience and association. One learns, if one is at all observant, that a boy of five and a boy of eight or nine want an entirely different trend of comment. The same conversation and comment on things will not suit both. And, too, girls are interested in entirely different things. To illustrate, I have in mind a young chap of eight years who comes to me periodically for treatment. When he comes into the operating room alone or with his mother, he is a splendid patient. Occasionally his grandmother comes along—a typically dotting grandmother, who constantly passes complimentary remarks about him in his presence. The boy seems actually embarrassed, and I know it vexes him to have such remarks made, for it makes it appear that he is but a youngster while in his own mind he is quite a young man. It is amusing to note his demeanor under the two situations. Children do not conceal their emotions and so it is easy to learn types and how to classify them. Every child is different, it seems, and has to be treated just a little bit differently. We have, however, a few little rules which we try to follow.

At the first sitting we have the attendant get the name, age and reference from the parent of the child before he comes into the operating room. In this way we take particular pains to know the child's

name and to address him by it when he comes in to us. To a child this has quite an effect. He warms up to you immediately, and in his estimation it makes him a grown-up. It is amusing at times to note how responsive and acquainted this one thing will make a child. Everyone of you can go back through the years and recall instances of the grown-ups addressing you as "little girl" or "little boy" and how you disliked it. As an experiment, try this on the next little patient who comes into your office and note the response. You will learn it is "rubbing the fur the wrong way." With this in mind we are particularly careful to call the child by his name at all times.

We have no playthings in our operating rooms, such as suspended birds and floating ducks for the cuspidors, no Mother Goose stories to tell and no fooling. We have, however, a border of animals around the walls, which is merely to present the juvenile aspect. But this is something stationary and cannot be handled. We try to impress the child that he is there for business, and we begin immediately. A few minutes' play with the child—real idle play—will make him entirely too familiar and hard to govern. We keep our handpieces well oiled and use small, sharp burs. A noisy, wabby handpiece, a noisy motor and large, dull burs have no place among the instruments of operation for a child.

If the child proves incorrigible, we excuse the parent. The child alone with us has no one's sympathy to obtain—consequently he does not expect any. Incorrigible children are usually children of fond parents. This type of child is much better off alone. A child of this sort has to be convinced in the beginning that the operator is the boss; after that he makes a splendid patient. With children who are really frightened excusing the parent would be unfair. This type of child requires a great deal of explanation and careful procedure during the first few sittings, especially the first one. We try as much as possible to induce all parents to permit the child to come into the operating room alone. When alone with the child, one can do much more work in a given time, do it much easier, and be relieved of the burden of entertaining the parent. One does not realize how tiresome this one phase—that of entertaining the parent by way of conversation—can become until one experiences it. Besides, the child should have all one's attention. In view of the fact that children's work must be done exclusively on a time basis, any time-saving device thereby reduces the cost of operation.

We confine our appointments to thirty-minute sittings. This is plenty long for any child to sit still. We adhere to our schedule of appointments rigidly, and our patients, knowing this, are very prompt. In conducting a practice on this plan one's attention is undivided. A full thirty-minute period can be used without feeling the necessity of hurrying. Above all things one cannot hurry a child. One can give

better service, earn more money and expend less energy by giving definite appointments, adhering to them, and doing a certain amount of permanent work for each patient.

Before going into the operative procedure a filling material should be considered. It seems to be the regular procedure among a portion of the dentists to use either copper or oxyphosphate cement for filling material. It seems to me that there is no more place for cement in the deciduous tooth than in the permanent. Cement fillings invariably fail to seal the cavity and saliva seeps in at the margin, producing decay underneath. It is my impression that an oxyphosphate cement is worse than nothing. Copper cement is superior to the former, but in proximal cavities the contact is lost in a short time. In our practice we use only alloy, with the exception of synthetic porcelain for the anteriors and the inlay for the permanent tooth. In the case of anterior proximal cavities and a good many of them on the labial surface of the anteriors we paint with a 40% solution of silver nitrate at regular intervals to inhibit further decay.

It is our procedure to treat all cavities in teeth with vital pulps with a zinc oxide, eugenol and silver nitrate paste. At the first sitting we wash out the debris and remove all the loose particles with spoon excavators, isolate the tooth, dry, and insert a stiff paste made from the materials mentioned. We plan to treat as many cavities as we expect to fill at a subsequent sitting two to three days later.

We begin the preparation of a proximal cavity with a small knife-edged stone on the contra-angle, cutting down the marginal ridge and going down to the dentine on the occlusal. Next take a small inverted cone to cut back the enamel and to square up the step. We prepare all proximal cavities with a step on the occlusal, with the exception of an occasional mesial cavity in the first premolar where the contact is either low or absent, and the same on the second molar if the distal of the first is broken down and the marginal ridge of the second is not too greatly undermined. Chisels are used to cut back the frail walls and small, round burs, together with excavators, to remove the decay. Small, tapering, cross-cut burs serve best to finish the proximal wall and to widen the occlusal step. Great care should be taken in the dovetailing and widening of the occlusal step. The greatest difficulty one has with fillings in deciduous teeth is the providing of sufficient strength to the filling to withstand the stress of mastication. Increasing the width of this step as well as the depth will greatly increase the strength of the filling. There has been a great deal of damage done by some men, unintentionally of course, by advocating the leaving of a great bulk of decay in the cavity and sterilizing the same with some "cure-all," as submarine cement, which can be placed in a moist cavity. A great many operators have apparently taken this

advice too literally and, having had failures in the major portion of cases, have become discouraged. A great deal of discretion must be used here. It is better to leave a little discolored dentine than to expose the pulp, yet one must not go to the other extreme and leave intact the whole mass of decay.

In placing the filling, isolate the tooth with cotton rolls, dry the cavity and paint with a solution of silver nitrate, allowing it to remain in the cavity about one minute; wipe out the excess solution, dry, and insert with a wire loop a pulp-capping mixture. Next place the matrix (Wagner) and mix the alloy. It is very obvious that one cannot follow this procedure without the aid of an assistant. Enough alloy is mixed for a cavity twice the size of the one to be filled. Begin packing with a sloppy mix, burnish with small burnishers, and remove the excess mercury that comes to the surface. To finish the filling, express the mercury from the remaining portion of the alloy before burnishing. Be particularly careful to carve the filling to relieve the cusp of the opposing tooth. Occasionally it is necessary to smooth off the sharp, pointed cusps of the opposing teeth. This will eliminate a great many broken fillings because a child does not know how to favor a filling during the first hour or so while it is setting. Polish each filling at a subsequent sitting.

In the case of a proliferated pulp, isolate the tooth, sterilize with iodine and alcohol, flood the cavity with 1% clorazene, and work under the mass of the pulp with a large cotton point by drawing it around and under; dry and, with a large spoon excavator dipped in phenol, pass around and under the mass and amputate at the constriction. Most of these cases can be done without the use of a local anesthetic. In cases where an anesthetic is necessary, render the pulp slightly acid by the use of a little dilute sulphuric acid. Wash the cavity again with clorazene, dry and treat with eugenol on cotton with temporary cement for twenty-four hours. At subsequent sittings, keep the tooth isolated and free from saliva. At the next sitting, sterilize, wash with clorazene, remove the decay covering the pulp chamber, sterilize with silver nitrate, place the nerve capping and cover with a good grade of cement. Next prepare the cavity for filling and insert the alloy. Cases of simple exposure can be handled in the same way.

With non-vital teeth that are swollen or abscessed, plan to establish drainage at the first sitting. This can be done with an excavator or a small, round bur. Arrange the next appointment from three to five days in advance, which allows sufficient time for the swelling and soreness to subside. At the next sitting, remove the loose fragments of caries and seal in a treatment of formocresol for from twenty-four to forty-eight hours. When the patient returns, cut back the pulp chamber wall, gain access to the canal, and complete the instrumentation at this

sitting. Seal in another treatment of formocresol and dismiss the patient again for a like period of time. In nearly every case the root canals can be filled and the filling inserted at the next sitting. We are using as a root-canal filling material one part zinc oxide, one part silver nitrate powder, mixed with five drops of eugenol. This is mixed into a creamy paste and inserted with a small, smooth broach with a pumping motion. Fill the cavity with gutta-percha and apply a slight pressure to force the filling material up into the canals. Remove the gutta-percha and fill the pulp chamber with cement, prepare the cavity, and insert the filling material. Teeth so treated will resorb as naturally as those with vital nerves; however, they will resorb faster and be lost about a year in advance of the vital teeth.

It is not advisable, and is not suggested, that every devitalized tooth be retained. There are many cases where this would be impractical, as cases where teeth are broken down or are chronic and will not respond to treatment. When teeth are extracted for a child between the ages of four and eight, we advise the putting on of space retention appliances. Every deciduous tooth is a sort of reserved seat for the incoming tooth. With the loss of a tooth there is the consequent loss of space and lack of development. This not only shows in the facial outline, but makes a marked disfigurement in the eruption of the permanent teeth. Consequently the teeth erupt crowded, out of alignment and occlusion. A space-retaining appliance will do much to eliminate this condition. An appliance of this sort is constructed by making bands for the two adjacent teeth after the fashion of an orthodontic band and connecting them by a small wire following the margin of the gums. This is soldered to one band and is received into a tube on the other, which permits movement of the teeth. This can be constructed, also, by a single band with a wire following the gum margin and a crowfoot arrangement on the other end touching the tooth at the free margin of the gums.

Much can be done in a dental way by educating the parents regarding the care of the child's teeth. They can be shown the use of the toothbrush and paste and dental floss. They can be taught that periodic prophylaxis and examination will render a real service to them, both financially and from a health viewpoint as well. We send a notice to all our patients every four months to return for an examination and prophylaxis, and we stress the point of giving a real prophylaxis. We employ thirty minutes with a child for prophylaxis, and use, in turn, porte-polishing brushes, small revolving brushes, polishing cups and dental floss. With older children, from ten to fourteen years, a longer sitting is frequently required.

This observation and care will do many things. It eliminates toothache, it provides a masticating surface, it provides for the retention of



each tooth until it should come out normally, it provides for the detection of cavities while they are in the incipient stage, and it stimulates the tooth-cleansing habit on the part of the child. In cases of rapid development it provides for the removal of such teeth as are detaining or changing the course of eruption of the permanent teeth. It will eliminate a great deal of the orthodontic requirement. It is said that 45% of all orthodontic cases are due to early extraction. Dental care for the child will eliminate a large portion of this percentage.

Lastly, we come to the question of fees. Somehow we are all striving for the enlargement of our exchequer. To do this, one must plan one's work a great deal and stress the point of making definite appointments. So much time set out for a patient recommends to him that there will be a fee attached. The idea of running in any time any afternoon or having the parent call and say, "I am bringing Sonny down with me this afternoon and I want you to see if you can do something for his toothache," is merely a gentle insinuation that there is to be no lucrative sentiment attached. In other words, it will take only a minute to put something in the tooth, or, as is so very common, to paint it with iodine, and as people become very immune to small favors they expect that there will be no charge. Do not make any appointments with children that are theoretically tail-end appointments. One cannot do them any great service in a hurried minute or two. Set out a definite time and do some definite, permanent work for the child at each sitting. Impress upon the parent that it is permanent work and have the courage to ask a fee commensurate with the service rendered and the time employed.

2970 West Grand Blvd.

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## Correction

In the August issue of THE DENTAL DIGEST, pages 523 and 524, in the article by Dr. F. S. Weir on *Rebasing Lower Dentures*, Figures 5 and 6 should have been Figures 3 and 4, and vice versa. We regret the error and trust that this will correct any confusion in the minds of our readers.

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## The Principles and Practice of Administering Nitrous Oxide-Oxygen and Ethylene-Oxygen\*

(*Eighth Article*).

### TYPES OF PATIENTS

Prior to 1918, anesthetists believed that each patient who presented was a law unto himself and that success in administering anesthetics depended upon the development of a sort of sixth sense, through long experience, which enabled the anesthetist to recognize the stage of anesthesia in which the patient was at the moment, to anticipate the stage which would follow and to govern the administration in such way as to make that stage as favorable as possible.

In that year Dr. Heidbrink discovered, greatly to his surprise, that if 7% of oxygen was administered with the nitrous oxide for the first minute of induction, a large proportion of patients passed into a quiet and comfortable anesthesia in about 1 minute and 40 seconds from the beginning of induction. He noticed also that the symptoms of anesthesia were sufficiently delayed to permit easy interpretation, that there was no excitement stage and that, in many cases, the plane of anesthesia reached at the end of the minute and 40 seconds could be maintained for mouth surgery by the administration of 93% nitrous oxide and 7% oxygen after the minute and 40 seconds.

The introduction of this one element into the technic of gas administration places at the disposal of the anesthetist a more accurate means of classifying patients than would otherwise be possible. When there was no uniformity in technic, the anesthetist had no means of determining whether the difficulty in any given case lay in the technic or in the patient. Since the administration of 7% oxygen with the nitrous oxide, for the first minute, is the most favorable technic for all types of patients, the anesthetist will know that any difficulties which develop during that time lie in the patient and not in the technic. The uniform technic will enable the anesthetist to diagnose the kind and degree of difficulty which may develop at any stage of the anesthesia and will suggest the remedy.

### VISUAL CLASSIFICATION OF ADULT PATIENTS

The anesthetist naturally forms the habit of classifying patients by appearance. This often yields information of great value and is a habit to be carefully developed. He will learn to divide patients in

\* This series of papers is based on a clinic given before the Florida Dental Anesthetists' Society at Orlando, Florida, December 17, 1924, by J. A. Heidbrink, D.D.S., Minneapolis, Minn.

this way into three classes: (1) those whom he expects to react normally to the anesthetic; (2) those whom he expects to find unusually susceptible, such as debilitated and anemic patients, who are readily recognizable by a lack of pink color or the presence of blueness, especially in the lips and lobes of the ears; and (3) those whom he expects to find more resistant to the anesthetic, such as athletic, plethoric or full-blooded persons, the excited or hysterical, and those who give visual evidence of the habitual use of alcohol and drugs.

#### PERCENTAGE OF UNIFORM REACTION IN ADULT PATIENTS

Experience seems to show that adults are surprisingly alike in susceptibility to these anesthetics and that about 90% of them react to a uniform technic in a normal manner. The other 10% include the debilitated, anemics, athletes, plethorics, excitable, alcoholics and drug addicts.

This uniformity of susceptibility works to the disadvantage of the patient and operator if the methods, apparatus or technic is faulty, because results are likely to be uniformly unsatisfactory. For instance, if the administration be of pure nitrous oxide, the stages of anesthesia may overlap more rapidly than can be recognized and controlled by the average anesthetist; or the dental centers may not have been anesthetized when the other centers which produce the usual symptoms of anesthesia have been anesthetized; or the anesthesia may gain such momentum from the rapid administration of the gas that the patient will pass into deep and undesirable stages. If efforts be made to bring such patients back to a proper degree of anesthesia by the use of air or oxygen, it frequently happens that the patients are brought back too far and induction must be resumed. If patients are alternated between too deep and too light anesthesia, the anesthetist is likely to lose confidence in himself or in the anesthetic, the operation may be delayed, and nausea and depression, which might otherwise be avoided, are very likely to result.

If the methods, apparatus and technic be complete and uniform, this uniform susceptibility in normal adult patients makes possible uniform, quiet and efficient anesthesia with a maximum of safety, in a short time, in a manner comfortable to the anesthetist and the patients and unlikely to cause nausea or depression.

#### CLASSIFICATION OF ADULT PATIENTS BY THEIR REACTION TO THE ANESTHETIC

Even with the most highly developed ability on the part of the anesthetist, the visual classification of patients is very unreliable and may be seriously mistaken in many cases, as in the case of the patient

with a big red nose and the facial appearance of an alcoholic, who has never taken a drink. On the other hand, many confirmed alcoholics show no visible indications. The reaction of patients to a uniform technic will afford much additional information as to the kind and degree of any difficulty, and this information will be much more exact than that obtained by the visual classification.

Many of the patients who, with a good technic, pass into a quiet and comfortable anesthesia, with no serious trouble, possess possibilities which, under the influence of a bad technic, might develop into difficulties sufficiently serious to make anesthesia difficult or impossible.

### HANDLING SUSCEPTIBLE PATIENTS

The anemics and debilitated are the most susceptible patients. The anemics become anesthetized more rapidly than normal patients and require more oxygen, especially during the carrying period. Color changes and jactitation are slight and sometimes entirely lacking so that they cannot be depended upon as warnings against too deep anesthesia. The danger with patients of this type is that they will be passed into too deep anesthesia because of the absence of the pronounced symptoms usually accompanying such stages. The breathing should be carefully watched and special care should be taken not to permit the air passages to become obstructed through operative procedure or otherwise. In some cases of this type the displacement of the tissues which is necessary in the extraction of posterior teeth will obstruct the air passages sufficiently to stop breathing. In such cases it is necessary only to bring the tongue forward, reestablish breathing by pressure on the lower ribs and proceed as before. It is characteristic of this type of patient that in too deep anesthesia the breathing fades away and it is more slowly reestablished than in patients of more robust type.

The guides to the plane of anesthesia in patients of this type are the lid reflexes and the position of the eyeball, both of which are the same as in patients of other types.

In pronounced cases of this type, or when anesthesia for patients of this type must be prolonged, the proportion of oxygen should be increased to the maximum, which will permit the anesthetist to maintain surgical anesthesia.

Here should be mentioned patients with reduced alveolar or lung area, such as advanced tubercular patients and gassed soldiers. While they may not be more susceptible to the anesthetic, they may early show indications of oxygen lack and the oxygen should be increased accordingly. Some of these patients require a very high percentage of oxygen.

Dr. Heidbrink tells of a case of a rather robust ex-service man, who from appearances was suspected to be of the more resistant type. Before anesthesia induction was complete, he developed symptoms of

oxygen lack and the oxygen was increased from time to time up to 25%, after which the anesthesia was satisfactory and the operation was finished, and the patient made a good recovery. The wife of the patient then informed Dr. Heidbrink that the patient had but one lung.

#### HANDLING PATIENTS OF THE RESISTANT TYPES

This type of patients includes the plethoric or full-blooded, the athletic, the hysterical or excitable and the alcoholic and drug addicts. Children, who are usually considered resistant, will be described elsewhere.

The plethorics are the opposites of the anemics, because they have more than the normal amount of blood and it takes a little longer to displace the necessary amount of oxygen with nitrous oxide to produce anesthesia. If these patients present no other difficulties than being full-blooded, they have the usual anesthesia range and are not difficult to carry. They will show more than the average of blueness, but the anesthetist need not be concerned about this so long as their other symptoms are what they should be.

The athletic type includes persons who are physically well developed, especially men who earn their living by vigorous work out of doors. Such persons show more than the average amount of resistance to all influences, including anesthetics. If such patients have no physical complications, they have good anesthesia range. They may sometimes prove to be difficult patients because of a tendency to excitement during induction or while awakening, and it is advisable to carry these patients to a slightly deeper anesthesia than is required for normal patients as a protection against their awakening. These patients should be strapped in the chair in the manner described for alcoholics.

Hysterical and excitable patients are difficult only as they resist the administration of the anesthetic. They sometimes make it difficult to carry out the technic. Such patients should be consoled by suggestion, as far as possible, but it is frequently necessary to restrain them by holding their hands or strapping them.

If these patients are excitable only from psychological causes and there are no physical complications, they will have the average anesthesia range except as fear increases the rate of the pulse and of metabolism.

Anesthetists have sometimes been greatly alarmed by the conduct of patients of the extreme hysterical type following anesthesia. Instead of recovering normally, these patients have shown symptoms which anesthetists not experienced with this type of patient might mistake for symptoms of shock or collapse. These are signs of psychical reaction peculiar to this type of patient, "playing possum" and making a

determined and persistent bid for sympathy and attention. The more they are coddled, the worse they get. Experience with a few patients of this type will enable the watchful anesthetist to distinguish between such patients and any who might be suffering from unusual depression. Hysterical patients can be handled only by a firm manner on the part of the anesthetist. The degree of firmness required depends upon the degree of hysterical temperament, and in extreme cases the anesthetist may have to be severe.

Alcoholics and drug addicts are much alike in the character and degree of the difficulties they present. They are by far the most difficult patients in the induction and carrying periods. A long induction period is required, and about in proportion as the induction period is lengthened, the anesthesia range is narrowed. In extreme cases there is no anesthesia range, and there are patients of this type whom it is impossible to anesthetize satisfactorily with nitrous oxide without premedication.

In some cases of this type pure nitrous oxide has been administered for more than a minute after the first minute of nitrous oxide and oxygen, apparently without producing anesthesia, because the patients still talked and struggled and finally became violent. Where extreme violence occurs, it is usually not wise to proceed. One such case was a male, large, athletic, plethoric, a mouth-breather, a beer drinker and with a big moustache. This patient did not become anesthetized even after an unduly prolonged attempt at anesthesia induction. He became merely restless and talkative, and such demonstrations on his part progressively increased. The anesthetic was discontinued when pronounced symptoms of anoxemia, or oxygen lack, appeared. The patient was then premedicated with twenty (20) grains of chlorotone, and ethylene was tried, with no better success. Local anesthesia was then used, and the teeth removed. It is possible that morphine, if it had been used, might have sufficiently corrected the difficulties in this case to make possible successful anesthesia.

Ordinarily, general anesthesia for a patient manifesting so many visible indications of possible difficulties would not be considered, provided there were no contra-indications to local anesthesia. In this case the patient's decided preference for general anesthesia was the reason for the attempt. No doubt dentists are often persuaded against their better judgment to attempt general anesthesia under similar circumstances. By careful selection of the anesthetic best suited to the case in hand, most of the unpleasant occurrences from gas anesthesia can be avoided.

In more moderate cases operations that can be quickly done while the patient is in this condition may be performed without causing pain. The patients make a quick and good recovery and express themselves

as satisfied with the experience. The struggling is usually the result of some harrowing dream situation from which the patient is trying to escape.

Some of the extreme cases of this type will begin to struggle viciously within twenty (20) seconds of the beginning of the induction. By proper premedication most of these resistant types may be brought to practical susceptibility, and many of them will respond to the anesthetic in about the usual manner. How and when to premedicate will be told in the next article.

*(To be continued)*

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## The Great Ether Mystery

The late Lord Salisbury once said that the ether was nothing more than the nominative case of the verb to undulate. And scientific men picture it as something filling space and capable of undulating across space at the rate of 186,000 miles a second; and they teach that under certain circumstances its undulating energy is capable of being translated into equivalent energies of light and heat and electricity. They hold and long have held (we read in the Bookman) that such a substance must be, because light and heat and electricity seem to cross space at a definite rate as if forms of undulatory energy, and that therefore there must be some medium to undulate. Ether is thus primarily a pragmatic hypothesis, logical postulate, and has never been seen nor weighed as an actual substance. Yet physicists have reached certain definite conclusions as to the character of the undulating substance. It fills all space; it is five hundred degrees colder than the temperature of the earth; it has inertia and momentum; it exercises an enormous pressure—probably millions of tons to the square foot; it is millions of times denser and more elastic than water, and it is in perpetual squirming motion. This amazing substance—which has neither warmth nor radiancy in itself, and which we can neither see, nor hear, nor smell, nor touch—when thrown into vibration by vibrating matter, carries across space undulating energies capable of transformation into new vibrations of matter, and into those undulatory energies which enter our consciousness as light, heat and electricity. If it could be abolished merely as a medium between matter and our senses, we should become immobile, and blind, and unconscious. The sun might blaze within a yard of us and we should be unaware of it; indeed, the ether is our greatest mystery.





## Robert Wooffendale

ONE OF THE TWO FIRST KNOWN DENTISTS IN AMERICA

By H. H. Manchester, New York, N. Y.

Side by side with John Baker, the loose threads of whose career we gathered together to some extent in a previous article, must be placed Robert Wooffendale, who was long considered the first dentist in this country and may still turn out to be so.

Some of the details of his life were obtained from his son, who was then a dentist in New York, and printed by C. A. Harris in 1849, but since have been generally overlooked. Other facts may be read in his advertisements, while still others are to be found in the records of his family on Long Island.

He was born in Sheffield, Yorkshire, England, in 1742 and remained

### ROBERT WOUFFENDALE,

Lately from LONDON, but late from NEW-YORK,  
SURGEON DENTIST, (who was instructed  
by THOMAS BERDMORE, Esq; operator of the  
teeth to his Britannic Majesty) begs leave to in-  
form the public, that he performs

### All operations on the teeth,

gums, and sockets; likewise fixes in artificial teeth,  
so as to escape discernment, and without the least  
inconvenience.

N. B. He may be spoke with at his lodgings at  
Mrs. Hunt's, opposite Mr. Robert Leas's, in Second-  
Street. Philad. April 6, 1767.

Fig. 1. Wooffendale's announcement in the *Pennsylvania Chronicle*, Philadelphia, April 6, 1767. Probably his first ad in Philadelphia.

there until twenty years of age. In 1762 he went to London and became an apprentice with White & Gipps, the druggists. While with them he attracted the notice of Thomas Berdmore, who was the dentist to George III. After his apprenticeship of probably three years was finished, he was taken into Berdmore's office as an assistant, where he remained until he had learned the methods of the profession. About that time he was left some property by his father and emigrated to New York, arriving, it is said, on October 30, 1766. His son believed him to have been the first dentist in New York City. Perhaps it was at that time that he made a full set of teeth for William Walton, which were thought to have been the first in America.

At the beginning of April we find him in Philadelphia, where he advertised in the *Pennsylvania Chronicle* of April 6th (Fig. 1).



In this advertisement he stated that he was "lately from London, but last from New York," and had been instructed by Thomas Berdmore. He informed the public that he performed "all operations on the teeth, gums and sockets," and fixed any artificial teeth "so as to escape discernment."

### ROBERT WOOFFENDALE,

SURGEON DENTIST,

(At Mrs. Hunt's, opposite Mr. Roberdeau's, in Second-street.)

**F**ROM the Encouragement he has received from the Public, thinks it necessary to stay some Time longer in this City—He performs all operations on the teeth, gums and sockets; likewise fixes in artificial-teeth, so as to escape discernment, and without the least inconvenience.

Fig. 2. From *Pennsylvania Chronicle*, June 22, 1767.

He seems to have had a reasonably good practice in Philadelphia, for on June 22, 1767, he inserted a notice in the *Pennsylvania Chronicle* thanking the public for their patronage and stating that this was such that he would remain some time longer in the city (Fig. 2).

That same year he married Martha Stevenson of Long Island and went to live upon a farm at Jamaica.

On January 21, 1768, he advertised in the *New York Journal* that he had returned from Philadelphia and during his stay in America

ROBERT WOUFFENDALE, Surgeon Dentist, begs Leave to acquaint the Public, that he is return'd from Philadelphia, and performs all Operations upon the Teeth, as usual.

N. B. Mr. Wooffendale intends residing at Jamaica during his Stay in America, but will attend at New-York every Thursday; such Gentlemen and Lady's who require his Attendance, are desired to leave a Line with Mr. Moore, next to Mr. Rappalje's, at the Fly-Market.

Fig. 3. Wooffendale's notice in the *New York Journal*, January 21, 1768.

intended to reside at Jamaica, but would attend patients in New York every Thursday. This advertisement is of historical importance (Fig. 3).

In March, 1768, or at about that date, he returned to England and began practice at Sheffield, his native town, but a little later removed to Liverpool. There he remained fourteen years and built up an important practice. In 1783 he published a small volume entitled *Prac-*

*tical Observations on the Human Teeth* (Fig. 4). The book was published in London, but on the title page Wooffendale is designated as a surgeon dentist at Liverpool.

PRACTICAL  
OBSERVATIONS  
ON THE  
HUMAN TEETH.

BY R. WOUFFENDALE,  
SURGEON-DENTIST, LIVERPOOL.

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L O N D O N,

Printed for J. JOHNSON, N<sup>o</sup>. 72, St. Paul's Church-Yard.  
and Messrs. RICHARDSON and URQUHART, Cornhill.

M D C C L X X I I I .

Fig. 4. The title page of Wooffendale's book.

The first sentence in the book serves to give us a rather surprising conception of the popular understanding of dentistry at the time, for Wooffendale writes: "Whatever relates to the teeth is so little generally known and understood that every attempt to elucidate the subject, which is the direct result of practical knowledge, must have its use."

The book is written in non-technical English and explains to the

public the teeth, their diseases, their care, and the methods of dentistry. He begins with the care of children's teeth, but soon gets into subjects of interest to adults. Some of his chapters are still interesting. He treats of offensive breath in a style which forecasts that of some of the present dentifrice advertisements.

The effect of smallpox on the teeth is described rather fully and is

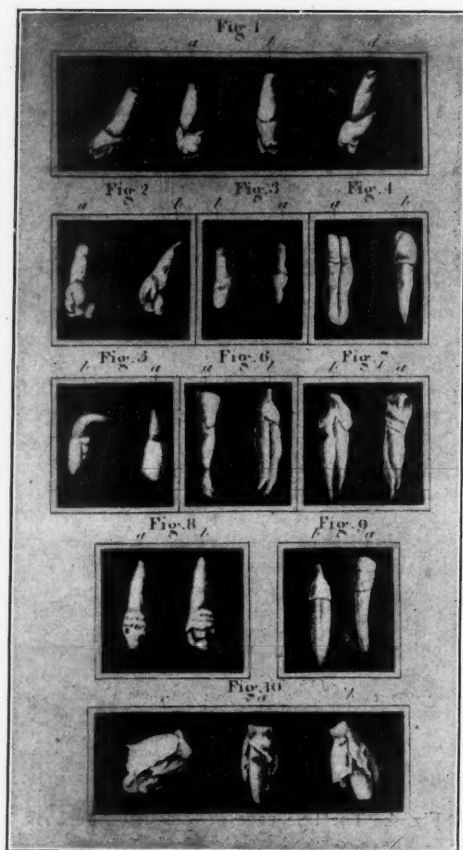


Fig. 5. A plate of supernumerary and peculiar teeth from Wooffendale's book.

of interest because such cases are not so common now as they were then.

Wooffendale well knew the effect of the teeth or their loss on appearance, and in one chapter he deals with the treatment of the teeth in youth to prevent a projecting lower jaw.

He gives several examples of supernumerary teeth. In a plate in his book, which we are reproducing (Fig. 5), Figures 1 to 4 represent such teeth; Figures 5 to 7, peculiar teeth he had met with; Figures 8 and 9, the effect of smallpox; and Figure 10, teeth heavily covered with tartar.

He recognized various forms of toothache, including the common sort, inflammatory, nervous, sympathetic, and that due to denudation.

In filling the teeth he had used both lead and gold, but preferred gold because he said the lead was affected by the chemicals of the mouth.

In describing the drawing of teeth he remarked that he had never yet seen a jaw bone broken.

He described scurvy of the gums, which corresponded to about what we know as pyorrhea.

In supplying the teeth by art, as he called it, he recognized transplanting, though he said that its success really depended upon chance. In order to take root, the new tooth should fit, but if this was impossible, it was better to use a smaller one than to file down a large one. In general, he did not recommend it, but said that if a tooth were knocked out by a blow, it should by all means be replaced.

He made crowns, screw teeth, bridges and complete sets. An interesting remark in regard to complete sets was that he had never seen any stain imitating the gums which retained its color.

For artificial teeth he advised sea-horse ivory rather than the ordinary sort.

He remarked that even filing the teeth would influence the appearance and have considerable effect on the speaking.

He had a dentifrice of his own, but recommended cleaning the teeth with cold rather than warm water.

By various experiments he showed the injuriousness of many of the nostrums then advertised for cleaning and whitening the teeth and remarked, in general, that the use of acids made soft teeth.

As a whole, his book is particularly interesting to us, because it gives us a good idea of what must have been the state of dentistry when it was introduced into this country.

About this time Thomas Berdmore, from whom Wooffendale received his training, died, and Wooffendale felt free to set up for himself in London, where he soon developed an important practice.

In the meantime, however, the Colonies had won their independence from England, and Wooffendale decided to return to New York and the modest estate which he held at Jamaica, Long Island. He arrived in New York and established an office there, but after he had practiced there only two years, he turned the business over to his son John and retired to his farm at Jamaica.

Here his wife died in 1808, and he himself on October 3, 1828.

Miss Wooffendale, his daughter, at the beginning of the nineteenth century had a well-known school at Jamaica and also in New York City.

Robert Wooffendale, at his death, willed his case of instruments to his son John, who at one time was at 84 Broadway, N. Y. C., and later removed to 27 Partition (or Fulton) Street.

In a letter of reminiscences, written some years later, E. Parmly stated that in 1815 John Wooffendale was one of the four most prominent dentists in New York City. John continued in practice for many years, or until about the middle of the century.

342 West 85th Street.

## Dental Health Talks

SPONSORED BY THE PUBLIC SERVICE COMMITTEE OF THE CHICAGO  
DENTAL SOCIETY

The Chicago Dental Society's Public Service Committee is planning a campaign of Dental Health Education and for that purpose is training a class of twenty-five speakers. In order to secure material for the use of these speakers, three hundred and fifty dollars (\$350) will be given in seven prizes of fifty dollars (\$50.00) each for the best twenty-minute speech suitable for presentation to the following types of audience:

Grammar School Children  
High School Children  
Parent-Teachers Audience  
Kiwanis or Rotary Club Audience  
Church Audience  
Factory Talk, Employees Audience  
Radio Talks

Points to be considered:

Simplicity of English  
Facts  
Suitability for specific audience

Any contributor is eligible to write on any or all subjects. Write on one side of paper only. Place manuscript in envelope with separate note giving name and address of sender. Writers agree that all material may be used by the committee. All material should be in by October 1, 1925.

Address all mail to: Dr. F. B. Rhobotham, Room 1406, Field Annex Building, Chicago.

HERBERT E. PHILLIPS, *Chairman*,  
Sub-Committee on the Lay Education of the Public Service  
Committee of the Chicago Dental Society.

## The Oral Diagnosis of Systemic Disturbances\*

By William G. Downs, Jr., D.D.S., Evansville, Ind.

In no department of our professional life have we been so lax and inefficient as in that of diagnosis. We have not, in the first place, attempted to educate ourselves to the high plane which will enable us to make effective diagnoses. I mean by this that our field so closely dovetails into that of the physician that they are almost inseparable, and yet we have made but the most paltry kind of effort to become familiar with that other field which is so interdependent with our own. In addition to this fact, we have not seriously attempted to know all of the necessary phases for complete and detailed, accurate diagnoses in what constitutes strictly our own somewhat narrow field. We have, in a fashion, realized the importance of correct diagnosis, but beginning with our actual inability, through ignorance, to diagnose correctly, we have been too prone to neglect even those diagnostic measures which we had at our command and to let the most obvious of conditions go undiagnosed, or, at best, have made a faulty or haphazard attack on the subject. The result has been: first, that our patients have suffered because of a lack of the attention which was their due; second, that we ourselves as individuals have suffered in our practices and in loss of reputation and standing; and third—and by no means least—our great profession has suffered in the loss of the esteem of physician and layman alike, and particularly that highest esteem to which from the nature of our work, if raised to the high point which it could and should be, we are entitled.

I do not expect to tell you gentlemen and brothers in the profession anything new or startling this evening. Most of you have had many years of more successful and intelligent practice than I have. Most of you come to your task as well or better equipped temperamentally and in training than I can claim to be. It is with no sense of superior intellect or training that I wish to call your attention to certain salient features of my subject. I have been fortunate in being so situated that I have been *forced* to observe certain things that probably do not stand out in such bold relief in the average, private, general practice. It is only that my work has thrown me into such contact with the results of our professional labors and in such quantities that I have had my attention forced to some of these points which probably you gentlemen in routine practice have not had impressed on you so forcibly.

In speaking of faulty diagnoses I wish to divide the subject into two parts, the purely dental, or that pertaining strictly to the teeth and the oral cavity, and the systemic, or that which originates in the

\*Read before the Green River Dental Society of Kentucky at Owensboro, May 14, 1925.

tissues within the proper range of the dentist's observation and is transmitted elsewhere, or which originates elsewhere and has a manifestation or effect observable in our regular field. The former class is strictly dental, and while frequently not getting the close analytical study which it should have, it is not nearly so sadly neglected as is the latter. The average dentist is at least fairly familiar with the conditions which he meets there, and if he anywhere nearly approaches competence, he is fairly well able to cope with it and reasonably alive to causes and results. It is in the latter group, that of systemic diagnosis from the point of view of the orologist, that I see the greatest lack and in which I am the most keenly interested. Were I to attempt to cover this entire field in detail, this short paper would most certainly develop into a bulky textbook. For that reason it is my intention to select only what I conceive to be the most important and salient facts and to call your attention to certain of the more outstanding ones that I know are often overlooked.

In my work in the various baby clinics in Evansville I have noted the very great prevalence of manifestation of the deficiency diseases. I would put at the head of this classification the various types of rachitic disturbances. Rickets, as you well know, does not always consist of crooked and malformed legs and arms, but is more frequently manifested in other ways not so susceptible to a "snap" diagnosis. These little patients present with all sorts of difficulties over teething, which a normal, healthy child should not fall heir to. When the teeth do begin to appear, they are all too frequently malformed, discolored, irregular, and the patient never seems to recover from the bad start that he got at primary dentition. Of course, certain cases of this kind can be traced to some actual childhood disease, the fevers particularly. Tuberculosis, syphilis, particularly of the hereditary type, and the other malignant diseases, all play their parts. However, fortunately such a condition of the teeth and mouth is in a vast majority of cases only the signpost to deficiency of nutrition, and the child whose nutrition is carefully guarded is little apt to show such symptoms. In cases where there is any room for differential diagnosis the endocrinologist and pediatrician should both be consulted, and if the endocrines are eliminated, proper diet with especial attention to vitamine-content foods will usually bring the child's condition pretty close to normal.

Before I pass on to the subject of nutrition in some detail, I cannot resist calling attention to a somewhat new and, I believe, extremely important phase of my subject—the endocrines. Unfortunately, there is practically nothing definitely known about the exact bearing of these glands upon dentition and but very little, with any accuracy, of their effect on systemic conditions. I think, though, that all the authorities are in accord in believing that they do exercise a most important effect on the growth of the various organs and upon all metabolism. When



there is any suspicion of endocrine involvement, I would recommend that a man thoroughly versed in internal medicine be called in as consultant and the possibility of such a condition called to his attention.

To pass on to the phase of nutrition, I wish to call your attention first to a lack of the anti-rachitic Vitamine D upon dentition and the formation of the bones of the face, particularly the mandible. I believe that the administration, under proper direction, of cod liver oil for the first few years of a child's life will tend more than any other single nutriment to obviate these deficiency malformations of the mouth and jaws. We have long since discarded the once accepted theory of the possibility of a lack of certain chemical constituents, such as the calcium salts, in the diet, except for the undoubted value of certain of the alkaline salts for their benefit in correcting acidosis. If the child's diet is otherwise properly balanced and sufficiently heavy in the various vitamine-content foods, there will be a superabundance of these strictly chemical constituents. Aside from the Vitamine-D content in cod-liver oil, the diet should be properly balanced in each of the other three, and if the child's food includes the leafy vegetables, citrus fruit juices, tomato juice and the normal quantity of butter fats, there will be no lack of chemical elements for a proper nutrition. I sincerely believe that nothing will contribute so greatly to carrying a child successfully through the period of dentition as a diet strong in the different fruits—the juicy acid ones, such as oranges and the other citrus varieties for their vitamine content and fruit acid values, and the pulpy ones, of which apples are the best example, for their mechanical cleansing effect on the teeth and septa and their bulk and coarser parts for sweeping out pyloric contents.

I have somewhat digressed into the field of treatment, but quite frequently some treatment is necessary to verify a proper diagnosis. To return to the diagnosis—before definitely giving over to malnutrition, one should always eliminate entirely the malignant diseases, and this is a field that must be covered by a competent diagnostician or internist. It is unforgivable, however, for the oralogist not to be tactilely alive to all of the features of the diagnosis which come within his particular ken or to fail to pass them over for their full value to that diagnostician. In this light occasionally the only suspicious symptoms of tuberculosis and lues are to be found within the vision of the dentist. Often the patient is wholly unaware of infected tonsils, pharynx or larynx until his attention is called to it by his dentist. Again I say it is wholly inexcusable for the dentist to overlook any such possibilities or to fail to refer these cases for verification and treatment.

In the case of children I find a great deal of unwillingness on the part of dentists to extract broken-down, putrescent and abscessed tem-

porary teeth. This spirit is to some extent commendable on their part, due to the fact that such extractions may cause malformations and malocclusions with their subsequent possible train of difficulties. However, if and when such conditions arise, again it is true that the proper diagnosis and treatment may eliminate these conditions. But in taking the view that these infected teeth should be allowed to remain, the dentist is only considering the strictly dental phase, and that possibly remote; and quite frequently he lets pass entirely an immediate serious condition with possibly much more serious later effects as a result of retaining such teeth. When this condition is encountered, by all means take out all of such indicated teeth. I have done almost full-mouth extractions on some of these little patients, put them on a properly balanced liquid or nearly liquid diet, and have seen them begin to improve amazingly and almost immediately. Strange to say, quite frequently my worst fears concerning the possibility of malocclusion are found to be without foundation, as the enamel organs of the permanent teeth seem to be in their proper relation before such extractions are done and often less liable to injury from such a cause than they are from injury by infection when these abscessed teeth are allowed to remain in place. I cannot too strongly stress the advisability of removing such teeth in young patients, and I believe that you will find that the better and keener of our medical colleagues will quite agree with this course.

It would, likewise, probably not be entirely amiss here to call attention to the unwillingness of many dentists to extract abscessed teeth for both children and adults when such teeth are causing acute inflammatory conditions. It is most remarkable to me, in view of the fact that the first principle of treatment for all such conditions elsewhere in the body is to open and drain, that the dentist will *refuse* to extract in such condition while the case is acute, when by so doing he would almost inevitably abort the chronic condition which in this way he invites.

211 Boehne Building.

(To be continued)



## Causing Mastication to Tighten Loose Teeth

AS RELATED TO THE EDITOR

By G. P. Phillips, D.M.D., Boston, Mass.

A friend, who had never before been a patient, was referred to me to see what teeth should be extracted for the purpose of making one or more partial dentures.

On examination the lower centrals, laterals and bicuspid were all in position but quite loose. The lower cuspids and the lower first and second molars on both sides were in position and fairly firm. Most of the upper teeth were in position, but the upper centrals, laterals and right posteriors were loose. From the general condition of the mouth and the patient's temperament it was thought that if some of the teeth were extracted and partial dentures made, they were not likely to be satisfactory. It seemed that if any of the teeth were to come out for the purpose of having dentures made, all of them would have to come out.

The mouth was clean. In fact, the patient had been referred by the pyorrhea specialist who had just finished scraping, polishing and grinding the teeth, and this he appeared to have done thoroughly. The patient was a man about fifty-five years of age, and the scraping and polishing "got on his nerves" to such an extent that he refused to go back to the other dentist even for the purpose of reporting the verdict about the extraction of teeth. He said, "I'll do anything I am told to do but that."

I replied: "Very well, then, I am going to direct you to do something that will seem foolish to you, but I want you to try it. Go to a store where you can buy Jewish rye bread, which comes in the form of little round, black loaves. Cut the 'heels' or tough part of the crust from this bread and chew it, after each regular meal, without butter and without taking anything to drink to dissolve it, until it becomes fluid."

In two weeks the patient returned. Some of the loose teeth were noticeably firmer, and the sensitiveness was much less. The gums had begun to shrink around the necks of the teeth and, while they exposed more tooth structure, the entire tone was better. In four weeks practically all of the teeth were sufficiently firm so that no dentist could think of extracting them, and this condition has proved to be permanent.

The patient, who at first disliked bread, has now developed a liking for it and says he has just found out that bread, by itself, can have a pleasing taste. He has taught the others members of his family, including his children, to use it regularly. They like it, and I believe they will reap great benefit from its use.

483 Beacon Street.

## Togo's "Discursions"

(Some years ago a prominent dentist in the Middle West contributed a number of short articles to the *Bulletin of the Illinois Dental Society* under the nom de plume of "Togo." He wrote on matters dental, using the Japanese-American idiom made famous by Wallace Irwin, the creator of "Hashimura Togo," that delightful "inquiring reporter."

Our dental Togo has been obliged to restrain his natural urge to discuss the problems of the day owing to his having, as he puts it, "large variety of jobs, each requiring individual attention at same time others were occurring," but now we are happy to announce that Togo is once more free to touch on those many-sided subjects that complicate dental practice today, and we are sure the readers of THE DENTAL DIGEST will welcome his breezy letters as they appear in forthcoming issues. Togo's announced intention to relieve "dangerous pressures in expression department" follows.—L. W. D.)

*Editor of Digestible Dental Magazine—*

*Hon. Sir:*

Period of elongated silence indulged in by Japanese intelligence has been occasioned by large variety of Jobs each requiring undivided attention at same time others were occurring.

This is frequent situation Mr Editor encountered in land of efficiency experts 1 room apartments & other deleterious substances. Owing to conditions enumerated parking space in insane asylums, seaside resorts & other ½ deck retreats are often becoming difficult to obtain in sufficient quantities.

At present time Mr Editor brain thought occurring whenever possible have produced dangerous pressures in expression department which will therefore explode continuously if convenient until partial return to normalcy is noticeable.

Distracted thoughts occurring recently regarding various catastrophes of delightful dental practice & everyday life will be dealt with Mr Editor in manner pleasing to all who happen to agree with them.

Unnecessary difficulties of Life are presently increasing on every hand and both feet. Distracted dentists in land of Hon Uncle Sam are experiencing proportionate shares of all disturbances noted and adjustments of same should be made preceding final payments of life insurance companies wherever possible in order to be of benefit to supposed head of family.

Among subjects readily discernible on horizon & elsewhere requiring immediate attention when convenient are

Dental Education: Including study of dosage, time & age limits & natural resistance of patients to prolonged treatment. X Rays, Price

Raise, Practice Builders, Poison Gas and other modern equipment demand full discussing in pages supposed to offer dentistry in digestible form to all cash subscribers & numerous others who are able to swipe copies from office of Hon Neighbor.

Golf & gold inlays compose questions of great importance in life of present day practitioner while he is attempting to carry on both branches entirely during daylight slaving hours.

Old fashioned cures vs. modern curettements & relations of these to question of summer vacation in increased amounts should also be ventilated.

The Simple Life & why we only think we want it. These and variety of other subjects are enough to keep Japanese & all other brains in World occupied until readers are completely overcome with fatigue & unassimilable information.

Hoping you are the same.

Yours discursively,

Togo.



## New York University Establishes New Half Million Dollar College of Dentistry

The College of Dentistry was officially established by the Council of New York University at its last meeting, according to a recent announcement from Chancellor Elmer Ellsworth Brown. The new school will be known as the College of Dentistry of New York University.

As part of the plan for establishing a complete course in dentistry and oral hygiene, New York University acquired the property of the New York College of Dentistry. It consists of two six-story buildings at 201-213 East 23d Street, New York, with a value of at least \$400,000, entirely free from debt, according to Dr. Thomas Darlington, well-known New York physician, who has been treasurer of the institution for almost ten years.

Six hundred students were enrolled in the courses of the College of Dentistry last year, and ninety were granted the degree of Doctor of Dental Surgery at this year's Commencement.

The New York College of Dentistry was the third oldest institution of its kind in the United States. After a large public service of more than half a century it has within the last few years been making such strides in the improvement of its equipment and standards as to have rendered it a conspicuous example of the new tendency toward the improvement of dental education.

The laboratories and other facilities of New York University and Bellevue Hospital Medical College will greatly augment the opportunities for research in dentistry and oral surgery, according to Dr. Holmes C. Jackson, assistant dean of the Medical College. Medical classes in the Dental College will be under the direct supervision of the heads of departments of those subjects in the Medical College, Dr. Jackson said, and the teaching of the medical sciences will conform closely to that given in the Medical College.

The establishment of a Dental College has been a recognized part of the program of New York University, Chancellor Brown said, and is considered but one more means of extending the University service for public health. There is thus added to the great medical and surgical clinic of the University Medical College what is probably the largest dental clinic in this country.

Classes will be open for the first time to women, and several already have qualified for entrance. No student will be received who has not had one year of pre-dental collegiate work.

Members of the Board of Trustees are: Rev. Dr. George Alexander, president; Arthur M. King, New York attorney, vice-president and chairman of the executive committee; Dr. John Edgar Welch,

former dean of Fordham Medical College, secretary; Dr. Thomas Darlington, treasurer; Dr. John Bethune Stein; Dr. John P. Munn, president of the United States Life Insurance Company; Colonel Walter G. Eliot; Dr. Ellison Hillyer; Henry H. Hawling; Frank A. Fall; Richard H. Wevill; and John Nelson Shreve.

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## Paul Revere's Horse

By Julius L. Bischof, D.D.S., St. Louis, Mo.

In Boston there once lived a D.D.S.  
Who helped us out of a terrible mess.  
He is known in history, far and near,  
As the "Dentist Jockey" and "Paul Revere."

At twelve one night he rode through the streets  
Calling the Yanks from under their sheets.  
But now comes the question we must decide—  
What color of horse did our champion ride?

It's funny, this fact they let us bemoan  
Whether Sparky was white or black or roan;  
And the pages of history nowhere say  
That the nag was a bobbed-tailed shaggy bay.

Paul was a dentist, so the horse wasn't fat—  
We know 'cause he made it in three hours flat,  
But he beat the enemy, who came in fast boats,  
This demon of speed, always hungry for oats.

But we're strong for Paul, though full of despair  
For not knowing the color of his pinto's hair.  
And the history writers should sink in remorse  
For not telling the shade of the Doctor's horse.

411 Tower Building





## The Status of Dental Education

(This is the second of a series of articles from that portion of the annual report of the President of the Carnegie Foundation for the Advancement of Teaching which has to do with dental education. This part deals in an interesting way with some of the differences between dentistry and certain recognized specialties of medicine. It should be read with care in preparation for the third and concluding part, which is expected to appear next month.—Editor.)

### DENTISTRY PROPERLY A FORM OF HEALTH SERVICE THAT SHOULD BE MADE EQUIVALENT TO THAT OF AN ORAL SPECIALTY OF MEDICINE

Recent advances of science on the borderlines between medicine and dentistry, particularly during the past fifteen years and especially from the contributions of pathology, bacteriology, and roentgenology, have shown that certain common and simple disorders of the teeth may involve prompt or insidious development of serious and possibly fatal ailments in other parts of the body. It has also been demonstrated that dental service, even when superficially perfect from purely mechanical and esthetic points of view, may hide or evolve local pathological conditions favorable to the onset of infectious disease elsewhere in the system, if and when that service disregards certain physiological requirements that neither dentistry nor medicine appreciated before the advent of recent discoveries. A discriminating attitude by individual physicians and dentists toward dental disorders, in the light of the earliest of these disclosures, led to the definite establishment of specific relationships between oral and systemic conditions, and has aroused belief in the existence of others awaiting detection. The reality of such significant correlations has emphasized the desirability of searching enquiry into their nature and into the extent of their occurrence, for the promotion of more accurate diagnosis and of more nearly perfect control, by both dentists and physicians, of numerous conditions of local or general disease.

The import for dentistry and medicine of these significant findings on the borderline between the two, and of the further discoveries they presage, is obvious. They force the conclusion that dentistry is an important mode of health service, and that, in general, its practice is quite as significant for the maintenance of health as that of the accredited specialties of medicine. Dentistry should no longer be ignored in medical schools, and its general health-service features should be given suitable attention in the training of general practitioners of medicine. Antagonism between medicine and dentistry cannot be explained on any basis of public interest or advantage and has no justification in

any sentiments that are worthy of respect, for both professions are agencies for health service and cannot perform that service faithfully on any other conditions than those of earnest and effective co-operation. The practice of dentistry should be made either an accredited specialty of the practice of conventional medicine, or fully equal, in grade of health service, to an oral specialty of medicine.

There are two sides to the question raised by the alternatives in the last preceding statement. Against the desirability of a conversion of the practice of dentistry into an accredited specialty of the practice of conventional medicine are a number of important prevailing conditions. Neither organized medicine nor organized dentistry desires such a conversion or would be content with it. Since the dental and medical statutes in every state in this country, and in every province of Canada, oppose serious obstacles to it, the dental laws would have to be changed to permit it. Owing to the need for exceptional digital facility in the manifold intra-oral procedures of dental practice, the extensive technical training and clinical instruction peculiar to it cannot be superimposed on a conventional medical curriculum, leading to the degree of M.D., without making the period of dental training prohibitive in length for most prospective general practitioners. On the other hand, the medical curriculum is too rigid, and the views of medical state boards and of medical teachers are too unyielding, to permit substitution of training in the essential mechanical aspects of dentistry for anything now contained in the required parts of the undergraduate medical curriculum, although the inclusion of dental subjects among the prospective elective courses to be open to candidates for the M.D. degree would facilitate development of dental instruction under the auspices of medicine. Unlike the practice of some specialties of medicine, such as that relating to disorders of the eyes by diagnostic and directive medical specialists in ophthalmology (oculists) supplemented by modern optometrists as specialists in refraction and by opticians, the practice of health service applied to the teeth could not be divided properly among analogous stomatologists, dentists, and dental technicians. Such a distribution is unattainable because dentistry, in all its terminal manifestations, must be practiced in the mouth of the patient, which cannot be done reliably without responsible comprehension of the import of the variable biological conditions involved and without adequate ability to perform the requisite intra-oral hand-work.

In support of this statement it may be said that the details in an ophthalmologist's or an optometrist's prescription for a pair of glasses can be obtained and transmitted with exceptional precision. On such a prescription, glasses can be made by machinery, by an optician, with relatively perfect accuracy, under standard and stable conditions, and the glasses can be fitted by an optometrist (or optician) by very simple

superficial adjustments that may have considerable range of mechanical and biological variation without detriment to the patient's eyes. In dentistry, however, the equivalent of an ophthalmologist's (or optometrist's) prescription cannot often be "obtained and transmitted with exceptional precision," nor filled accurately by machinery; and the dental analogue of an optician's glasses must be filled as a rule with microscopic exactness to prevent accession of microorganisms into the substance of the tooth or teeth affected, and to avoid unnatural or undesirable contacts with or stresses upon the teeth involved or against which the appliance impinges. Anything to be placed in or upon the teeth, however well prepared it may be mechanically, rarely fits perfectly when first tested, but must be directly and often patiently adapted because of the individual peculiarities and the inherent difficulties of the attending variable oral and operative conditions. For this reason, therefore, an appliance made by a dental technician from a dentist's models or specifications cannot be fitted by the technician or any one else as superficially as an optometrist (or optician) effectively adjusts a pair of glasses. On the contrary, it must usually be modified, and tested in place in the mouth, until it is a perfect fit, in accordance with all the complex anatomical, physiological, and esthetic requirements and the extreme degree of mechanical accuracy involved; and then must be skilfully put into place, and adjudged mechanically and biologically sound, and artistically satisfactory, by the "diagnostic and directive" practitioner of dentistry himself. A dental technician can prepare an appliance from a dentist's models or specifications and, under a dentist's supervision, can adaptively modify it; and, by attending co-operatively to various *extra*-oral procedures, a technician can very effectively and desirably increase the amount of the direct personal *intra*-oral service of the dentist he assists; but without the education in the medical sciences that the practice of dentistry requires, the most competent dental technician, who with such additional training would be a dentist and not a technician, could not be safely entrusted with the responsibility of fitting appliances into or upon teeth, and at present could not do so without violating the statutes that regulate the practice of dentistry in this country and in Canada.

On the other side of the question raised above, it is clearly essential, from the point of view of public welfare, that, if dentistry cannot be made the health-service equivalent of an oral specialty of medicine within the scope of the practice of conventional medicine, it should be given that character in continued independence of conventional medicine, so far as organization is concerned. For the lay public, quality of health service rather than traditions or partisanship pertaining to such service is the primary desideratum, and medicine or dentistry by any other name would be a service just as grateful. If

dentistry, having been developed and established as an independent form of organized public service, can rise promptly to its opportunity to become the full health-service equivalent of an oral specialty of medicine, and will do so in good order and without economic waste, as it appears to be inclined to do, then few would welcome the needless embarrassments and demoralizations that would follow an attempt to destroy progressive dentistry by forcibly including it in conventional medicine. If, however, dentistry as now organized should not wish to become or could not develop into the full health-service equivalent of an oral specialty of medicine, public interest would ultimately require the creation of an accredited specialty of medicine to render oral health service in conformity with all the evident necessities of such practice.

It should be clearly realized that actualities rather than labels or symbols are the important factors in a consideration of this situation. It is helpful to recall in this relation that the term "medicine" is commonly used to signify not only the healing art in a general broad academic sense, but also to indicate particularly the practice of that part of the whole of the healing art that is commonly taught to those who receive the degree of M.D. "Healing art," as a term, does not logically include the application of means of preventing the occurrence of disease or of maintaining health and normality, but medicine and dentistry are employing such agencies with increasing effectiveness in the most desirable extension of their usefulness; nor does the "practice of medicine" include such factors in health conservation as dentistry, public-health administration, nursing, or pharmacy. By regarding the practice of these and also some minor types of activity for the maintenance of health or for the prevention or cure of disease, together with the practice of conventional medicine, as divisions or branches of *health service* instead of divisions or branches of "medicine," one not only follows a logical and convenient course of reasoning, but also ignores the insignia of useless professional partisanship and obtains a clear suggestion of the proper position and due recognition of the practice of dentistry as it is, and also as it may be extended.

The outstanding deficiency of the science of dentistry has been its inability, hitherto, to lay the foundations for discovery of methods for the general prevention of decay of teeth and of diseases of the closely adjacent tissues. Discovery of means of these fundamental ends would revolutionize the practice of dentistry by eliminating most of the occasion for it. Although these disorders are among the most commonly occurring of all bodily ailments, medicine has ignored them; and dentistry, in her absorption in oral mechanics, has been helpless before them and, until recently, has been content to follow with repairs, reconstructions, and replacements. The primary causes of dental decay and of periodontal disease appear to be hidden in the biological secrets of the conditions or processes of dentition and nutrition, or of oral vari-

ability, or of all of them; and it seems probable that the causative influences, whether related to defective dental development or impaired nutrition, or involved in particular conditions of dental environment, will not be discovered until the medical sciences are used effectively to that end. When dentistry becomes equivalent to an oral specialty of medicine, dental vision and effort, combined with biological understanding and aided with methods of enquiry of corresponding adequacy, may be expected to bring these dental maladies into the realm of the completely preventable disorders, if that should not be inherently unattainable. Comprehensive and penetrating research in these relationships is a basic need for the universal promotion of human welfare.

(To be continued)

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### December, 1925, Meeting of the First District Dental Society, New York

The First District Dental Society of New York announces a three-day meeting to be held December 2-4, 1925. It is planned to make this an annual feature of the Winter program of this Society. The program will contain a carefully selected list of essays by dentists and physicians of national reputation, and clinics by leading exponents of the various specialties of dentistry. The watchword of the meeting will be *Better Dentistry*, and no effort will be spared to make this meeting definitely helpful to every one who attends.

All sessions will be held at the Hotel Pennsylvania, New York. Exhibits will be featured and opportunities for their inspection will be provided.



## World Conference on Narcotic Education

The Board of Directors of the International Narcotic Education Association, at their spring meeting in Los Angeles, May 12, 1925, beside approving the carrying to completion of a nation-wide teachers' and parents' program, adopted a resolution for a World Conference on Narcotic Education to be held in the summer of 1926 in connection with the Sesqui-Centennial celebration in Philadelphia, to be preceded by a program of intensive study and research, attended by widespread educational publicity and followed by the practical application of standard policies and programs in all lands. A copy of the resolution follows:

Resolved: That a World Conference on Narcotic Education shall be held in the City of Philadelphia about the third week in June, 1926.

Resolved: That the League of Nations be requested to call a conference of the Opium Committee, the Mixed Sub-Committee of the Health Committee, and the Advisory Committee on the Traffic in Opium, and such other organizations as our President shall deem proper, to meet at the same time and place with educational agenda only.

Resolved: That the President of the United States be requested to invite the Governments of the World to join with our Government in participation.

Resolved: That Congress be requested to make an appropriation for a fitting participation of the Government of the United States.

Resolved: That the Press, the Pulpit, the Motion Pictures, the Radio, Educational Officials, federal, state, local, civil, religious, educational, patriotic and other constructive organizations and institutions be requested to cooperate.

Be it further resolved: That the President of the International Narcotic Education Association, with the advice and consent of the Executive Committee, is hereby authorized to appoint committees and take other steps deemed necessary or advisable to carry out the provisions of this resolution.

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### LAST CALL

Great A. D. A. Meeting to be held in  
Louisville, Ky., September 21-25, 1925



# DENTAL LAWS

## Summary of Dental License Requirements Throughout the World

By Alphonso Irwin, D.D.S., Camden, N. J.

### ONTARIO

Last Dental Law dated 1911. *Synopsis of Dental License Requirements:* The English language, dental supervision, Royal College of Dental Surgeons, of Ontario; standards established by By-Laws are required.

Annual examinations are held at the R.C.D.S. in Toronto the third week in April and a supplemental examination usually in September; the time, place and all essential details are announced prior to the meeting.

*Matriculation requirements:* A candidate for admission to the course in Dentistry will be entitled to the status of an undergraduate who possesses one of the following qualifications: (1) A certificate issued by the Ontario University Matriculation Board, of standing as for Pass Matriculation in the subjects of English, History, Mathematics, Latin, Experimental Science (Physics and Chemistry), and one of Greek, German, French, Italian or Spanish (preferably French); (2) A certificate of matriculation in the Faculty of Arts of an approved British or Canadian University; (3) A certificate accepted by the General Medical Council of Great Britain for registration as a student of Medicine or Dentistry; (4) A degree in Arts (not being an honorary degree) from some recognized University; (5) A certificate of standing as an unconditioned student of a University in the United States may be accepted, but it must be on the basis of a complete four years' course in a High School accredited by the said University. Such a certificate must include Latin for at least two years.

*Professional requirements:* (1) Matriculation in the Royal College of Dental Surgeons of Ontario before admittance; (2) To pursue the study of dentistry for a period of at least five academic years; (3) To comply with the rules and regulations of said School of Dentistry;



(4) To pay required fees as per schedule and to pass all examinations;  
 (5) At least two weeks beforehand to file the official application with the Dean of the School; (6) To furnish all evidence demanded of having complied with all requirements up to the final examinations;  
 (7) To be of full age of twenty-one years and of good moral character. The subjects for examination are those contained in the curriculum of the School of Dentistry of the Royal College of Dental Surgeons of Ontario. No student while in attendance at the school shall engage in the practise of dentistry for his own pecuniary benefit. The Board shall have power to withhold the issue of a Certificate of License to practise Dentistry from any student for such period as the Board may see fit, for good and sufficient reasons or for violations of By-Laws as specified.

By-Law No. 7. *Certificate*.—The Certificate of Licentiate of Dental Surgery to be granted by this Board shall be signed by the President, Secretary, Treasurer, and the Members of the Board present at the time granted.

Section 2.—The following shall be the form of the Certificate: The Royal College of Dental Surgeons of the Province of Ontario, Canada, by virtue of authority vested in it by the Legislature of Ontario, awards this certificate to ..... who has complied with all the requirements of the law, and after examination by the Board of Directors, has been adjudged qualified to practise Dentistry in all its branches, and entitled to the title of Licentiate of Dental Surgery, which is hereby conferred upon him. In witness whereof we have hereunto subscribed our hands and affixed the seal of the College, at the city of Toronto, in the Province of Ontario, this ..... day of ..... in the year of our Lord one thousand nine hundred and ....."

By-Law No. 40.—Admission of graduates of other colleges to membership in the Royal College of Dental Surgeons and for other purposes:

*Graduate Dentists*. Section 1.—Graduate dentists of ethical conduct and good moral character holding a graduation diploma from a recognized Dental College, upon meeting the matriculation requirements of the Royal College of Dental Surgeons of Ontario, may be admitted to the examinations of the Royal College of Dental Surgeons, and be required to write upon the final examinations in all of the subjects contained in the R. C. D. S. 5-year curriculum. Examination fee, \$200. Such candidate may attend any portion of the session of the School of Dentistry of the R. C. D. S. without tuition fee, by paying the examination fee at the time of admission.

*Graduate Dentists, Citizens of Ontario*. Section 2.—Citizens of Ontario who have regularly graduated from a recognized dental college, and who have established themselves in regular ethical dental practice

for more than five calendar years, may be admitted to examination without meeting matriculation requirements. Examination fee, \$200. Such candidate may attend any portion of the session of the School of Dentistry of the R. C. D. S. without tuition fee, by paying the examination fee at the time of admission.

Section 3.—(1) Holders of a certificate of qualification issued by the Dominion Dental Council of Canada, subject to sub-section 2 will be admitted, without further examination, to membership in the Royal College of Dental Surgeons of Ontario. Registration fee, \$50.00; (2) A Dominion Dental Council Certificate will not be accepted from any graduate who began the study of dentistry subsequent to September first, 1921, and did not take a five-year Dental course.

Section 4.—Undergraduates of a recognized dental college may, upon matriculation in the Royal College of Dental Surgeons of Ontario, be admitted to advanced standing upon payment of the regular fees.

Graduates or undergraduates of other Colleges applying for examination or seeking advanced standing must present evidence of having completed the R. C. D. S. matriculation standard previous to the commencement of dental studies.

License is issued by Board of Directors, after examination by examiners appointed jointly by the Board and by the University of Toronto. Same examination leads to degree of D.D.S. issued by the University of Toronto.

Board of Directors composed of: Hon. R. H. Grant, Minister of Education, Province of Ontario, ex-officio; A. D. A. Mason, L.D.S., D.D.S., President, Toronto; E. E. Bruce, L.D.S., D.D.S., Vice-President, Kincardine; R. Gordon McLean, L.D.S., D.D.S., Registrar, Toronto; S. S. Davidson, L.D.S., D.D.S., Ottawa; W. C. Thompson, L.D.S., D.D.S., Hamilton; W. M. McGuire, L.D.S., D.D.S., Simcoe; S. M. Kennedy, L.D.S., D.D.S., London; H. Irvine, L.D.S., D.D.S., Lindsay.

Annual registration with the Treasurer of the R. C. D. S., November first; fee, \$3.00.

W. E. Willmott, Secretary-Treasurer, 240 College Street, Toronto, Ontario, Canada.

Verified March 6th, 1925.

## ORANGE FREE STATE

Registration of dentists in this Province under a Consolidating Bill is pending in the Union Parliament for the 1925 session. At the present moment the Orange Free State Ordinance 1 of 1904, which is still in force, provides for the registration of dentists. Under that

law only dentists duly qualified to practise in Great Britain or Ireland are entitled to register. The registration fee is £7. 10. 0.

By the Union Act 21 of 1919, any person who is a British subject born in South Africa, and any British subject domiciled in the Union when he commenced his studies and having proceeded therefrom for the purpose of prosecuting those studies, and having remained domiciled during the prosecution thereof, has obtained a dental degree or diploma after examination by any University or State Examining Board is entitled to registration, provided that the curriculum and standard of examination required for such degree or diploma are not below those prescribed under the law of this Province (i. e. British qualification).

In addition to and after having obtained registration it is necessary for any person who wishes to practise as a dentist to take out a license of £15 every year, a half yearly license being obtainable at a cost of £7. 10. 0. by dentists commencing practice after June 30, in any year.

Verified February 12, 1925.

#### REGISTRATION

All dental diplomas registrable are required to cover a minimum curriculum of four years, and in all cases a satisfactory preliminary education must have been required.

No diploma granted by the Government or any University or other body of a foreign country shall entitle the holder thereof to registration unless equal rights and advantages are given in such country to the holder of any British registrable degree. Temporary licenses to practise are not granted. In the Orange Free State dentists registrable in Great Britain and Ireland are registered.

Application for registration should be made to the Registrar, Medical and Pharmacy Council of the Orange Free State, Bloemfontein, Orange Free State, accompanied by the original diplomas or certificates and a fee of £7. 10. 0. (\$36.50). Declaration sworn before a Justice of the Peace should also be submitted as to (a) personal identity, (b) the authenticity of the diplomas or certificates presented, (c) the fact that applicant is entitled to practise as a qualified dentist in the country where the said diplomas or certificates were granted, and (d) that they have never been debarred from practice in any country by reason of misdemeanor or professional misconduct. Applicants must also possess qualifications which would entitle them to registration in the United Kingdom. If for any reason the Medical and Pharmacy Board refuses to grant registration, an appeal may be taken by the applicant to the High Court who have authority to reverse the ruling of the Board.

The following degrees, diplomas, or certificates shall be entertained

in any application for registration as a dentist under section one of Act Number 21 of 1919:

Holland: Tandarts State Certificate.

United States of America (on proof of a bonafide four year curriculum to the satisfaction of the Council).

Harvard University: D.M.D., with certificate of State Dental Board of Massachusetts.

Michigan University: D.D.S., with certificate of State Dental Board of Michigan.

Pennsylvania University: D.D.S., with certificate of State Dental Board of Pennsylvania.

Form of Declaration of Identity to be submitted by applicants for Registration under the provisions of Section one of Act No. 21, 1919:

Full name .....

Address .....

hereby make oath and declare that I am the person mentioned in the accompanying documents submitted by me in support of my application to be registered as a dentist in this Province; that the said documents were granted to me and are my own lawful property; and that by virtue of their possession I am entitled as regards professional qualifications to register and practise as a qualified dentist in the country where said documents were granted; that I have never been debarred from practice in any country by reason of misdemeanor or professional misconduct; that to the best of my knowledge and belief no proceedings involving or likely to involve a charge of professional misconduct are pending against me in any country at the present time, and that I am a British subject.

(If the applicant was not born in the Union of South Africa): That I was domiciled in the Union of South Africa when I commenced my professional studies and having proceeded therefrom for the purpose of prosecuting those studies and having remained during the prosecution thereof so domiciled, I duly obtained the degree, diploma, or certificate submitted herewith.

Sworn before me this ..... day of ....., 19...  
Justice of the Peace for the District of.....



## DENTAL ECONOMICS

### What Became of a Dentist's Hobby

By S. A. Allen, D.D.S., Glendale, Cal.

What is your hobby? Could you convert it into a producing occupation? Could you make a living without practicing dentistry? That a hobby—a sideline—may be turned to practical account was shown in the case of my friend, Dr. X, after it had served as a recreation for most of the years he has lived.

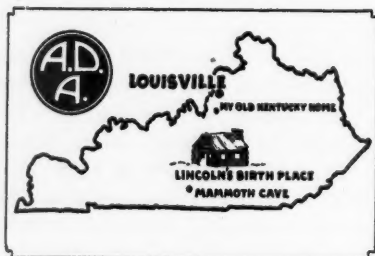
Confronted with the problem of changing climate for his family's sake and not considering it best to continue the practice of dentistry, his finances were not in condition to permit him to retire. In his hobby—that after dentistry about which he knew most—he found his answer, something that he could turn to with confidence as a main source of obtaining a living.

Perhaps his choice of a hobby would not be yours. Perhaps a hobby ought not to be selected, looking to it as a possible means for future support; but in the case of my friend Dr. X, it was fortunate for him that he had a working knowledge of something besides dentistry. He was always practical, and maybe that is the reason he spent his spare time with chickens. I have visited him many times during past years and, after dentistry was talked over, we would go out to see the chickens. We would pass through the different runs where segregated and high-priced fowls stalked about and view the incubators where eggs worth almost their weight in gold were turning to chicks. I would watch him gather up a fine rooster and listen to wonders of good breeding. Then I would hear tales of blue ribbons and of the sales made to people in near and far-away countries. My friend has bought, sold, hatched, brooded, trapnested, maintained small flocks and attended chicken shows, always with the idea that this was his recreation, vacation time.

Dr. X says that while chickens have no teeth, his professional education is of great use to him! Sanitation, materia medica, anatomy, physiology, nutrition, chemistry and bacteriology can all be put to practical purposes.

So Dr. X, after twenty years of active dental practice, leaves his

chair and patients and surrounds himself with all that is modern in chicken equipment, accommodating thousands where he had but dozens before. But the increase in numbers means only more room and more work, for the same laws and rules apply to the many as to the few, and large flocks are receiving benefits of a practical and valuable experience—gained through a hobby. Isn't it worth thinking about?  
405 Lawson Bldg.



## PRACTICAL HINTS

This department is in charge of V. C. Smedley, D.D.S., and George R. Warner, M.D., D.D.S., 610 California Building, Denver, Colorado. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to them.

NOTE—Mention of proprietary articles by name in the text pages of the DENTAL DIGEST is contrary to the policy of the magazine. Contribution containing names of proprietary articles will be altered in accordance with this rule. This Department is conducted for readers of the DENTAL DIGEST, and the Editor has no time to answer communications "not for publication." Please enclose stamp if you desire a reply by letter.

Trinidad, B. W. I.

### *Editor Practical Hints:*

Am a subscriber to the DENTAL DIGEST and interested in Practical Hints. Having gained much knowledge by reading them, I wish to put before you a case for your kind help.

A woman (female), 68 years, came to me wearing a partial lower plate, also a full upper with the exception of one tooth (cuspid). She complains that about 15 minutes after she puts in the upper there is a peculiar feeling like a pricking or burning sensation, or something like it, all around the lips and cheek where the plate touches, but the gums are O. K. There is also a heavy pressure experienced on her chest intermittently. As soon as the plate is removed there is quite a relief. The lower plate is O. K. The patient seems to be in good health. I may say the upper plate does not fit snugly on the left posterior side, there being a space of about 2 or 3 mm. Articulation was not good. The lower plate did not hug quite well on the left posterior side, having a space also. Through the answers in Practical Hints I surmised that the upper plate must have been touching the incisive foramen too heavily, so I reduced around that area and she got quite a relief; but the same kind of feelings (with the exception of the heavy pressure on her chest) she sometimes experiences, but not as badly as before. I am afraid to take off more from the plate, thinking it will get too slack. Of course, I did not touch the palatal foramina as the plate on one side is not touching at all, and I got a little better articulation. Please explain the trouble and oblige.

L. R. H.



ANSWER.—I think you should extract the one tooth on the upper jaw and make this patient new full upper and partial lower plates that fit the mouth properly with a careful relief of pressure over foramina areas. If you use rubber make them of black or natural base rubber excepting where it may be necessary to use pink for esthetics. It would be preferable, however, if you are equipped to provide her with same, to make the dentures of celluloid, gold, or, best of all, pure platinum base, supporting baked continuous gum.

I cannot exactly explain the cause of the disagreeable symptoms you describe for this individual patient, but it is logical to assume that plates so poorly fitted and balanced in occlusion as these that you describe may be the cause of most any kind of disturbance or discomfort, whether through rubber irritation or nerve strain and irritation which might result in most any kind of symptom through reflex activity.

Perhaps some of our readers may have more specific help for you but, in a general way, this is my opinion.—V. C. SMEDLEY.

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*Editor Practical Hints:*

What do you consider the ideal way to polish a gold inlay? How do you hold a small one such as a gingival?

F. S. W.

ANSWER.—I have an apron of closely-woven cloth sewed to a wire frame which clamps around my neck and hangs at the waist level in the form of a projecting pouch, for the purpose of catching and salvaging gold grindings and also inlays when they are flipped out of my fingers in the process of polishing with paper discs.

I know of no better way to polish an inlay, whether large or small, than to hold it in the fingers and polish with paper discs for flat surfaces and with small brush wheels and wooden points with pumice for grooves and fissures. This apron is a big help in preventing the search on the floor for small castings when you drop them.

—V. C. SMEDLEY.

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*Editor Practical Hints:*

As a constant reader of the DENTAL DIGEST and taking great interest in Practical Hints column, am seeking information.

I have a young lady patient, age 22, who seems to accumulate a cervical brownish stain on her teeth. The stain is found more on the lower teeth than on the uppers.

I would appreciate information, possibly a preventative measure, for this unpleasant condition. How can my patient keep her teeth

free from such stains as it is very embarrassing to her? Would appreciate any suggestions.

D. B. T.

ANSWER.—Your patient can keep the stain off at least the labial surfaces of her teeth with an orangewood stick trimmed to a paddle, or spatula shape at one end. Have her go over the surfaces with this stick with whatever dentifrice she is using or you recommend. If you think best she can provide herself with a Port Polisher in which to operate this little wooden paddle or polisher.

It is also quite probable that a regulation of this lady's diet would alter the tendency to this brown stain formation. You might suggest that she eat more roughage—whole wheat, bran, vegetables both cooked and in the form of salads (preferably uncooked) and much less or none at all, for awhile, of heavy foods such as starches (especially things made of white flour), and meats.—V. C. SMEDLEY.

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*Editor Practical Hints:*

Is there any successful technic for relining a full upper gold denture? If so, state technic.

Have made full upper gold denture for woman about 35 years of age. Denture satisfactory in every way; has worn for about six months. Recently she says the denture is the cause of her snoring, and necessitates removal at night. Before she wore denture she did not snore. Please state cause and remedy, if any.

Also what special qualifications would a dentist of a Class A four-year school be required to have in order to become a specialist in oral surgery? State also how many years it would take to obtain an M.D. degree?

A. N. T.

ANSWER.—To refit an upper gold denture you may take rebasing impression the same as for a vulcanite case, pour the impression with a hard artificial stone or make a metal die and swedge the gold base to fit it; or if it fails of a satisfactory fit in a limited area, such as around one condyle, for instance, a wax model can be made of this deficiency by pressing softened wax between cast and plate submerged in hot water. This wax model can then be invested, cast with gold and sweated with solder to the gold plate. This technique is also applicable to the rebasing of saddles under partial gold cases.

I cannot explain the cause of your patient snoring with dentures in the mouth and not without. Perhaps some of our readers will have better information for us on this subject. My opinion is that the proper solution of this difficulty would be for the patient to leave the

plate out at night. As a matter of fact, I think that all denture patients should leave their plates out at night if they can be persuaded to do so without being made too unhappy about it. It certainly seems reasonable that the mucous membrane of the mouth should be free from any denture fitting and be simply bathed in saliva as is normally the case at least during the hours of sleep.

Any dental graduate is qualified legally to practise oral surgery; but, in my opinion, no man should step from general practice to any specialty without first taking some post-graduate work in that specialty. I think perhaps this rule should apply more particularly to surgery than to any other branch.

At the present time a D.D.S. is required to devote four full years in a medical college to acquire an M.D. degree, and in most colleges the B.A. degree is required also as a preliminary. In some, I think, two years of liberal arts college is accepted. In other words, there is no credit whatever allowed for the dental degree.—V. C. SMEDLEY.

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*Editor Practical Hints:*

I read with great interest your answer to C. J. H. regarding "Phenolizing a Cavity," in a recent issue of the DENTAL DIGEST.

I will appreciate it very much if you will inform me what it is you refer to in the last paragraph of your answer to C. J. H. which reads as follows: "There may be several other sedative cements and cavity linings that afford this same protection, but the enclosed will indicate to you what we use and have confidence in."

Will you kindly let me know what in your opinion is good to use in a deep-seated cavity in which there is some decalcified dentine?

The saving of teeth is a great problem, in my estimation, and a conscientious dentist is "up a tree" many a time as to what is the best procedure to take in order to do justice to the patient and tooth.

Will thank you kindly for any information you can give me.

P. A. F.

ANSWER.—The enclosed circular will answer your question. This formula was published in the April Digest in my answer to Doctor Barber. Your second question is also covered, I think, in this article. I do not believe, with this sedative cement at our disposal, that we are ever justified in leaving decalcified dentine over-laying pulps in deep seated cavities. An exposed pulp capped and covered with proper material is infinitely safer from the standpoint of its future vitality and normal healthy functioning than it could possibly be under decayed dentine, no matter with what material or how it may have been saturated or treated.—V. C. SMEDLEY.

## CORRESPONDENCE

Germantown, Phila.

*Editor Dental Digest:*

In order to understand why a State-granted right to practice dentistry is restricted and fails to entitle its possessor to practice in any State of the Union without any further handicap or red tape, we must step back about half a century, or perhaps a little more, to the time when any Tom, Dick or Jennie could practice medicine or dentistry without let or hindrance in any part of Uncle Sam's domain.

While it is true that during this free-for-all period many well qualified men entered the ranks and laid the foundation on which the dental profession now rests, organized associations for mutual improvement, established schools, wrote textbooks, and did a lot of hard, unremunerated work that later proved helpful to their successors and to the community, it is equally true that their good work was handicapped by a horde of incompetents that brought the dental profession into disgrace.

The time came when those who had spent years to qualify themselves properly for practicing dentistry demanded that they should be relieved from the competition of others who entered the ranks after only a few weeks' instruction. The qualified men claimed that there should be a well-defined dividing line between the qualified and the unqualified, one easily recognized by the community. This led to the enactment by one State after another of laws fixing a standard of qualification and providing means for enforcing it. These standards were not the same. Some States were well provided with institutions properly equipped to instruct their citizens to meet the State's requirements, and therefore could demand a high standard. Other States, not so well provided with educational facilities, could not justly demand so rigid a qualification. It is a State's right to fix and enforce its own standard and to recognize or reject the standard of any other State. While this in many cases is a hardship, it is generally agreed that it has worked well for the profession and the community. To lessen this hardship, some States having standards nearly alike have formed groups, mutually agreeing to reciprocate so long as this quality existed. This suggests how a nation-wide dental license can be brought about. We have recently seen how tenaciously the States hold to the right to conduct their own internal affairs in the decisive rejection by the States of the Twentieth Amendment to the United States Constitution designed

to regulate by Federal enactment—child labor. This was so vigorously pressed that the United States Congress passed it by a large vote. Notwithstanding that nearly all the States have some sort of law regulating this matter, only a very few gave it favorable consideration. A Federal enactment to regulate the practice of dentistry would, undoubtedly, invite a like rebuff. It is a matter for the States themselves to decide, by mutual agreement.

WILLIAM H. TRUMAN.

47 High Street.

Sussex, England.

*Editor Dental Digest:*

I have read the interesting article in your June issue, entitled *Old World Wanderings of an American Dentist*, by Dr. J. J. Posner. I am afraid he has been a little misinformed as to the status of dentists in Britain. Owing to a High Court decision some years ago, a large number of men engaged in dental practice who had not graduated from a Dental College were declared not to be acting illegally. In 1921 a very stringent Dental Law was passed, but owing to the vested interest these practitioners had obtained, 8,000 (not 40,000, as Dr. Posner was informed) of them had to be allowed to continue. Owing to various causes, their numbers yearly diminish.

The Dental Law has been of great benefit to the dental graduate. Nothing pertaining to a dentist's work may be done in the mouth by an unregistered person. Even the mother who removes a loose temporary tooth for her child commits a technical offence. All advertising—and consequently the "dental parlor"—is swept away under very severe penalties.

The bulk of the wage-earners in this country are compelled to insure against illness in a State-approved society, a few pence weekly being deducted from the wages for that purpose. Next year these societies will have surplus funds amounting to \$200,000,000, a considerable proportion of which they will spend on dentistry.

L. TAYLOR.

Green Bay, Wis.

*Editor Dental Digest:*

In order to end once for all the controversy over the "youngest patient," I wish to enter the competition for any leather medal that may be awarded the winner. Some months ago I extracted the two upper centrals of a little boy two months old when his nursing mother brought him to the office "hollering" for help—the mother, not the boy! He was *born* with them. Anybody else?

W. T. SMITH.

Fayette City, Pa.

*Editor Dental Digest:*

Having read a letter from Dr. C. W. Reelhorn in the April DENTAL DIGEST in which he thinks he has broken a record for youthful patients, I should like to report a case.

I extracted a lower central incisor for a little girl the day she was *two weeks* old.

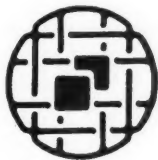
The history of the case is as follows. The father and mother brought the infant to my office the day she was two weeks old and said she was one of twins. When she was born, a large lump was noticed just inside the lower lip and the parents were worried, thinking she was deformed. Two days later during nursing this swelling burst. Pus came out, and when the smoke cleared away two teeth were in position but very loose.

These loose, sharp teeth cut the under surface of the tongue in further nursing, and it became infected. They said the baby had cried continually and had never been asleep since birth.

I extracted the looser tooth and dressed the tongue of the child in its mother's arms. The baby was asleep in fifteen minutes and she never had any further trouble. This case was presented ten years ago and she is a fine healthy girl today, as is her twin sister.

The parents say the operation saved her life.

C. R. HUSTON.



# DENTAL LABORATORIES

## Meeting of American Dental Laboratories Association

Elks Club, Louisville, Ky., September 21-22, 1925

### PROGRAM

#### MONDAY—SEPTEMBER 21ST

- 9.30 A. M. President's Address ..... E. L. Mueller, Omaha, Neb.  
 10.00 A. M. *Operating Economically*, S. G. Supplee, New York, N. Y.  
 11.00 A. M. *Meeting Competition* .... I. F. Miller, Pittsburgh, Pa.  
 1.30 P. M. *Anatomical Articulation of*  
                   *Full Dentures* ..... I. J. Dresch, Toledo, Ohio  
 2.30 P. M. *Buying* ..... T. M. Crutcher, Louisville, Ky.  
 3.30 P. M. *Recreation* ..... F. C. Miller, Detroit, Mich.  
 4.30 P. M. Illustrated Lecture on *The Practical Application of*  
                   *Casting Problems to the Commercial Laboratory*,  
                   Dr. K. W. Knapp, Minneapolis, Minn.

#### TUESDAY—SEPTEMBER 22D

- 9.30 A. M. *Backing Up Your Advertising and Building Good Will*,  
                   J. C. Schwartz, St. Louis, Mo.  
 10.30 A. M. *Educating the Laboratory Employees and Selling the*  
                   *Dentist* ..... E. L. Mueller, Omaha, Neb.  
 11.30 A. M. *Collections* ..... W. H. Schroll, Chicago, Ill.  
 1.30 P. M. *Equipment* ..... H. P. Boos, Minneapolis, Minn.  
 2.30 P. M. *Satisfying Employees* .... H. Fairbanks, Boston, Mass.  
 3.30 P. M. *Business Building* ..... C. E. Davis, Dayton, Ohio  
 4.30 P. M. Everybody's Hour—Open Discussion  
 5.00 P. M. Business Meeting—Election of Officers



# DENTAL SECRETARIES and ASSISTANTS

## Secretaries' Questionnaire

All questions and communications should be addressed to Elsie  
Pierce, care of THE DENTAL DIGEST, 220 West 42nd Street, New  
York City.

*I have been a dental assistant for several years. I like the work very much and it is my desire to perform my daily tasks to the best of my ability. However, the lack of observance, on the part of my employer, of some of the simplest rules for the maintenance of asepsis in the course of the various operations makes it very difficult for me to maintain the standard of service which I want to render and which I believe should be rendered in every dental office of reputable standing.*

*Our office is comfortably and well equipped. We have a fine sterilizing room with every convenience for the proper sterilization of instruments, linen, surgical supplies, etc., such as are needed and used in every up-to-date dental practice. I am very particular about my sterilization technic, realizing full well the danger of infection, but (and it is a big BUT), notwithstanding the care and attention I give this part of our office procedure, much of my careful sterilization goes for naught, because of lack of thought, I am sure, on the part of my employer. Following are some of the things that trouble me:*

*Why should a dentist dip his fingers into the solution or warm water that he is to use for irrigation purposes, in order to test its temperature?*

*In the handling of instruments, especially the pliers and mouth mirror, why is it necessary, if the patient asks a question during operative procedure, that upon removal from the mouth they be juggled from hand to hand or tapped against each other or against the bracket table or the arm of the chair, or the mirror handle run through the hair or back of the ear, etc., and then, the conversation over, returned to the patient's mouth for a continuance of the interrupted operation without any apparent thought on the dentist's part that they should be freshly sterilized or not used?*

*Why, if unexpectedly an instrument is needed that is not on the tray, must the dentist reach over to the cabinet and, selecting what he*

wants, contaminate all the rest in that particular compartment, besides his hands? Why can he not ask his assistant to get him what he needs?

Why does he forget to scrub up before returning to his patient after using the telephone or making change for a patient?

Why does he use a sterile towel to dry his hands, then in the midst of this mop his face, then finish drying his hands on the same towel?

Why does he clean his nails in front of a patient?

Why does he have to moisten his fingers with saliva to turn over the cards or charts when looking over a patient's case history, then proceed with the examination without washing up again?

When artificial dentures, bridges, etc., are taken from the patient's mouth, why does the dentist lay them on the bracket table or tray among the instruments in use?

I am sure that many other dental assistants have these same problems to face, or others of like nature, and I appeal to you to advise me as to what course to pursue and how to call these shortcomings to the attention of an employer; so that he will understand that it is not done in a spirit of criticism but in a spirit of helpfulness, to aid him to overcome bad habits of which he has unconsciously become the victim. Patients have called some of these things to my attention, and I know they greatly detract from the professional dignity which should always surround the dentist in the carrying on of a dental practice and which always impresses the patients as to the value of the service they are receiving.

Your reply will be awaited anxiously, and I am sure will help others besides myself.

F. McN., N. Y.

Your letter is a very pertinent one for all dental assistants. It is indeed a problem to try to assist a dentist to correct "bad habits" such as you mention, and many others which you do not speak of, which are daily occurrences in dental offices. As you say, these habits are acquired unconsciously, for I am sure that every dentist who has the welfare of his patients at heart and his reputation at stake does not deliberately expose all concerned to the dangers of infection.

If your employer is of the type who believes that his assistant is a co-worker, working *with* him for his best interests, I do not believe you will have much difficulty in bringing these lapses in proper technic to his attention, but may I suggest that you do this very unobtrusively and slowly. You know the old proverb, "Rome was not built in a day." Time and tact will be your greatest assets.

I have found that the dentist who has a capable, conscientious assistant is usually very glad to have her take every opportunity to point out to him such improvements as will please the patients and make for better service.

May I suggest two ways by which you can endeavor to solve your problems. The first is to make a detailed memorandum of your observations and those of the patients, and sometime when you are going over the office records and other business with your employer, at the close of the interview say to him: "Doctor, I have made some notations that I think will help you. Will you not take them home and go over them carefully? I am sure they will interest you inasmuch as you have asked me to suggest anything that I thought would benefit and improve the conduct of the office." This will make personal discussion unnecessary and you need not refer to it again unless the doctor pursues the subject.

The second is to seize tactfully every opportunity to help your employer realize what he is doing. For example, in the testing of the irrigation fluid or hot water you can say: "Doctor, one of your patients asked me the other day if it did not contaminate the water when you dipped your finger in it. Could we not test it by dropping some on the back of the hand?"

In the handling of instruments have several trays in readiness with duplicates which you can quietly slip in front of him, and, holding out an empty tray, say, "Doctor, I will take those used instruments." If you do this each time, I am sure he will realize why.

If instruments are taken out of the cabinet, you can say after one of these occurrences: "Doctor, I am sorry I did not know you wanted to use that. Will you not next time call upon me to get it for you? I know you desire all your instruments to be properly sterilized and I cannot give them this attention if you get them out of the cabinet yourself during an operation."

About scrubbing up after phone calls or making change, do not call the doctor to the 'phone while he is operating. Take the caller's number and call as soon as possible when the doctor can conveniently speak to him. If the doctor insists on being called to the 'phone, when he has finished quietly hand him the soap, brush and towel. I think he will take the hint.

No dentist should make change while operating. There should be a certain amount of currency in the cash drawer for that purpose.

When the same towel is used to dry the hands that is used for a face towel and handkerchief, be ready to hand him a fresh one for the completion of the hand-drying. When opportunity offers, you can say, "We seem to use so much extra linen. I wonder why."

If these suggestions do not help, then nothing but a frank talk on the matter will accomplish results.

Efficient service is always in demand, should you have to seek another position because of your interest in the ideals of your calling and the welfare of your employer.

## The Louisville Meeting

You are hereby notified that the first annual session of the American Dental Assistants Association will be held at Louisville, Ky., September 21-25, 1925. General Headquarters are to be in the Red Room, Hotel Seelbach.

The House of Delegates will convene at 9:30 A. M. on Tuesday, September 22d; also on Wednesday, September 23d, and at 9:00 A. M. on Thursday, September 24th.

The General Meeting of this first annual session will be held on Tuesday, September 22d, at 2:00 P. M., Red Room, Hotel Seelbach.

On Wednesday, September 23d, from 2:00 to 4:30 P. M., a Group Clinic will be given for dental assistants by dental assistants, Red Room, Hotel Seelbach.

The Annual Luncheon of the Association will take place at 12:30 P. M. on Thursday, September 24th, at the Hotel Seelbach.

General registration of dental assistants will be in the Lobby, East Entrance, Kosair Temple, from September 21st at 8:30 A. M. to September 24th. Badges for dental assistants will be issued at General Headquarters, Red Room, Hotel Seelbach.

The Constituent Societies are hereby notified that they are requested to file with the General Secretary the names and addresses of their delegates and alternates, at least 30 days prior to the first day of this annual session.

All dental assistants are cordially invited to attend all meetings.

JULIETTE A. SOUTHARD, *President.*

ANNA H. SYKORA, *General Secretary.*

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## Clinic Club

OF THE

EDUCATIONAL AND EFFICIENCY SOCIETY FOR DENTAL ASSISTANTS,  
NEW YORK

On Thursday evening, May 28, 1925, at the office of Dr. W. Short, 342 Madison Avenue, New York City, the Educational and Efficiency Clinic Club held its final meeting of the 1924-1925 season, closing another year which added several notable achievements to its already splendid record and which foretold fine things for the future. Agnes F. MacNeill was unanimously re-elected Acting Director of the Club for the ensuing year, Juliette A. Southard will remain as Director, Gertrude Roesh will replace Emily Campbell as Secretary-Treasurer, and Ann Marvel will take over the work of Anna Sykora as Corre-

sponding Secretary. The duties of the present chairmen of the various sections ceased automatically and new chairmen will be appointed in the fall.

The purpose of the Club—to demonstrate by means of clinics the many ways in which the dental assistant can be of more value to the dentist and of greater service to the patient—has been faithfully adhered to during the activities of the past year. The materials of each of the six sections, Secretarial, Chair Assisting and General Accessories, Sterilization, X-ray, Orthodontic Assistance, and Laboratory Assistance, has been greatly increased as the membership of the Club and the enthusiasm for the work have steadily grown. Although the Club still retains its leadership in this type of work among dental assistants, it must constantly be acquiring new ideas and new members to assure its progress, and it is the aim of its members to number on the roll of the new year every member of the Educational and Efficiency Society for Dental Assistants, New York. During the year just passed five clinics have been presented before dental organizations, among which were the First District Dental Society, Hudson County Dental Society and New York State Dental Society. A clinic will be given at the Convention of the American Dental Assistants Association which will be held at the same time as the American Dental Association Convention, September, 1925, at Louisville, Ky.

The meetings of the Clinic Club are regularly held on the third Monday of each month, September to May, inclusive, 7:30 P. M., at the office of Dr. W. Short, 342 Madison Avenue, New York City, and at each session a different phase of the work of the dental assistant is explained. Due to the date of the National Convention, the next meeting will be held on September 14, 1925. All members of the Society are welcome.

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## Tennessee Dental Assistants Association

The Dental Assistants Association of the Second District of Tennessee held its monthly meeting Tuesday evening, July 14, 1925, at the St. James Hotel, Knoxville, Tennessee. A very interesting program was rendered.

An elaborate dinner consisting of six courses was served and seemed to be enjoyed by all present. Dr. Harry M. Underwood was the after-dinner speaker and gave an interesting talk on the necessity of a dental assistant, pointing out some of the reasons why a dental assistant was so essential to the practitioner.

The Dental Assistants of the Second District are rendering a very

efficient service and proving their ability, as well as their necessity, in modern dentistry.

Before adjourning, the Association decided to have an outing and picnic at their next meeting to be held the second Tuesday in August.

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## Meeting

OF THE

EDUCATIONAL AND EFFICIENCY SOCIETY FOR DENTAL ASSISTANTS,  
FIRST DISTRICT, NEW YORK, INC.

The Educational and Efficiency Society for Dental Assistants, First District, New York, Inc., will hold its first meeting of the 1925-1926 season on the evening of October 13, 1925, at eight o'clock at the Academy of Medicine, 17 West 43d Street, New York City. The officers for the ensuing year are: Juliette A. Southard, President; Agnes F. MacNeil, Vice-President; Anna H. Sykora, Treasurer; Jean Tallaksen, Secretary; Mae L. Bennett, Chairman of Executive Committee; Kathleen Scanlan, Chairman of Membership Committee; Cora Brower, Chairman of Visiting Committee; Viola Watrous, Chairman of Reception Committee; Anna Neulinger, Librarian.

The Society is organized for the purpose of aiding the dental assistant to aid herself, and it is the policy of the Society to continue the classes in roentgenology, laboratory technic, paliametary procedure, office organization and sterilization, as well as any other instruction that is requested.

The committee in charge of clinics is accumulating new material for the clinics to be added to that already on hand, and an instructive season is assured in this phase of the Society's work. Several dentists of the highest prominence have already been engaged for the lecture courses, and also many speakers of national reputation.

There is no doubt that every meeting to be held by the Society this winter will be of very great interest and highly beneficial to every young woman engaged in the calling of dental assistant.

At the meeting of the American Dental Assistants Association to be held at Louisville, Ky., September 21-25, 1925, the members of the Society who will take an active part are the following: Juliette A. Southard, President of the American Dental Assistants Association; Anna H. Sykora, General Secretary of the American Dental Assistants Association; Emily Campbell, Member of the Board of Trustees of the American Dental Assistants Association and Delegate; Agnes F. MacNeil, Member of the Clinic and Program Committee of the American Dental Assistants Association and Delegate; Gertrude Facey, Member



of the Transportation Committee and Alternate; Jean Tallaksen, Alternate. It is hoped that many others will be able to attend and take part in the activities.

Among the very interesting features of the meeting at Louisville will be a number of clinics staged by dental assistants for dental assistants and others who are interested. They will consist of demonstrations in Secretarial Assistance, General Chair Assistance and Accessories, Sterilization, Radiographic and Laboratory Assistance.

The Educational and Efficiency Society has the honor and responsibility in this group of clinics of demonstrating chair assisting and useful accessories, and also of contributing to the general group of demonstrations, which will include the other sections.

The Chair Assistance Section will give a demonstration of the following: Care of the patient; first aid; mixing of cement, alloys and porcelain; preparation of local and general anesthesia; preparation of impression materials; making of accessories, such as gauze packs, wipes, sponges, etc., cotton applicators, pledgets, instrument wraps, bibs, glove wraps, head-rest covers in rubber, linen and paper, etc.

The Society meets the second Tuesday of the month from October to May, inclusive, at the Academy of Medicine, 17 West 43d Street, New York City. All dental assistants are cordially invited to attend, and members of the dental profession are welcome.

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## The Visible Explanation

By Sylvia Danenbaum, New York, N. Y.

With the fourth annual dinner on May 16, 1925, the Educational and Efficiency Society for Dental Assistants, New York, brought to a close another year of its life, a year of fine achievements and of further progress, and the members appreciate how much the life and the progress of this organization influence their advancement as dental assistants and, therefore, the standard of their service to the dental profession. It is the only means at their command to put the calling on the map of dentistry and to further their education in order to increase their efficiency and value in the dental office.

Very briefly, there are the regular meetings where the affairs of the organization are conducted in an open and parliamentary manner, and where there is usually one speaker who brings scientific knowledge and another who brings inspiration and news from the world outside the door of the profession. There are the classes, as the Laboratory Technic Class, where may be developed mechanical skill, or the Public



Speaking Class, where may be acquired the habit of thinking independently and where may be gained the precious power of mental balance. Service on the various committees offers the opportunity to learn the value of cooperation and goodfellowship and to develop executive ability. There is the library containing many books, editorials and papers relating to the work of the dental assistant. Thus can be pictured an array of events, a constant march of activities, and leading the parade are the standard-bearers, three strong. The central figure carries the Society emblem of blue and gold on a background of white. On her left the bearer flings proudly to the air the banner of Education, signifying greater efficiency, greater skill, greater vision, and, on the right, the banner of Loyal Service to each other, to the dental profession, to humanity.

But, as said a member of the Public Speaking Class not so long ago: "We are not all from Missouri, but we sometimes like to be shown!" There is one activity of this organization of dental assistants which has not been mentioned. It is the Educational and Efficiency Clinic Club. The Clinic Club is the visible explanation of the aims, the ideals and the purposes of this Society. It is a demonstration of the earnestness and sincere ambition of the intelligent dental assistant. It is a practical exposition of the ingenuity, the efficiency and the training of the capable dental assistant. The members of the Society are all members of the Club and, as such, may enjoy the advantage of the education which it is to clinicians and observers alike, whether the observers be dental assistants or dentists. It is the purpose of the Club to demonstrate by means of clinics the various ways in which a capable young woman can be of more service in the dental office both to the operator and to the patient. This has been accomplished many times in giving clinics before dental societies and conventions, and the success thus attained has been an incentive to the members of other dental assistants' societies all over the country. The Society, through the Clinic Club, has set a precedent of which the members may well be proud.

Let us pay a visit, in our imagination, to a clinic which was given a short time ago. As we enter the room, the eye is caught by the appearance of some six or seven young women, each dressed in a clean, starched uniform with white shoes and stockings, white cap, and a happy smile. They are behind their tables explaining their exhibits to eager, attentive listeners. After we have enrolled and have been greeted by the ever faithful Juliette A. Southard, we start our trip at the Secretarial table. Here we meet a cheerful dental assistant who, no doubt, less than an hour before was busy at the office where she is employed, polishing a gold inlay or perhaps developing some x-ray pictures, and, just to display her versatility, she is now ready

to explain the various systems of bookkeeping and filing, the many types of stationery, and devices for saving time and expense, which constitute her division.

From there we proceed to the next table, representing the Chair Assistance and General Accessories Section, to see specimens of true inventiveness—gauze and cotton swabs, packed and sterilized, sterile instrument and rubber glove wraps, emergency kits, oral surgery trays, and much more, too much to list here. This particular table is famous for its patronage of the five-and-ten-cent store. We examine celluloid hair receivers, glass dishes and plates, and sundry other articles converted into efficient dental utilities. The material at this table, as at the other tables, is contributed by the members of the Clinic Club and is the result of their experience in their work and their studies in the classes arranged by the Society.

We leave this table to visit the Sterilization Section, here to discover the various methods employed in the modern dental practice, and as we turn away we feel assured that the dental assistant is equipped with the knowledge and the ability to live up to her title, "guardian of asepsis in the dental office," as a member of the dental profession so aptly named her. Our attention is attracted by the exhibit at the x-ray table, where the proper preparation and care of the developing and fixing of solutions and the manner of developing are shown, as well as various systems of mounting the radiogram and filing.

We have now reached the Orthodontic Assistance Section. Here we learn of the many useful services which the assistant can render to the orthodontist. Of chief interest are the plaster models and the system of marking and filing them.

And now we are ready for the table representing the Laboratory Assistance Section. The clinician here demonstrates the setting-up and articulation of teeth as done by the assistant, the various steps in the making of the gold inlay, from the impression given to the assistant by the operator to the finished wax model ready to be invested and cast, and the pouring and separating of plaster models. There are also an exhibit on porcelain staining and a collection of bridges and plates constructed by members of the Clinic Club.

As we review the entire scene, we realize that the keynote is economy—sensible, efficient economy—and that although the clinic is divided into several sections for the sake of expediency, each dental assistant is capable of performing each phase represented there. We can understand that although she may not use any particular system exhibited, she has the power, the training and the intelligence to adapt herself to any system that she may be called upon to execute. It is easy now to understand why dental assistants approach the

clinicians after visiting the clinic and ask where they may obtain membership in the Society and why dentists ask the same question for their assistants and, as they tuck into their pockets the notes they have made, express the wish to attend a regular meeting of the organization to become better acquainted with its activities. The work of the Clinic Club is making friends for the Society and is convincing the critics and skeptics that its members, as dental assistants, have at heart a noble purpose and are living up to their motto, "Greater education for greater efficiency."

545 West 164th Street.



## My Idea of What a Dentist Expects of His Assistant\*

By Zillah Witherspoon, Indianapolis, Ind.

To many assistants who have for a number of years been in the service of dentists this is a trite subject, therefore the writer will assume that her audience is of such average intelligence that it need not be told the many, many duties that not only are expected, but are done well by the assistants to busy dentists.

One really has to have a natural instinct for being a dental office assistant, and the work involves exceptional domestic sense. Then, too, one must be a psychologist, a mind reader and, occasionally, a clairvoyant.

The vital features that mark a successful, agreeable and valuable assistant are symbolized by two classes, executive and manual. Which of the two assets is more valuable? The answer depends entirely upon the point of view and the individual case, perhaps. To the writer the executive is first, if not the more essential. This belief may be due to the fact that hers is not a mechanical mind!

As we all know, the executive end of a dental office entails a peculiar service. It would be impossible to find a better setting for the display of one's initiative and that elusive quality, personality.

In this class of service come bookkeeping, banking, monthly statements, collection letters, inventory and purchasing supplies, making and posting appointments, dismissing and receiving patients and innumerable other duties.

In the manual class are laboratory, chair work, sterilizing, etc. This service is not to be disparaged, but I believe that the assistant who strives for the executive pinnacle ultimately finds more satisfaction in her work and best serves her employer.

It is most gratifying to those of us who have been for a number of years in the service of dentists to have our positions given more dignity. In a way we have been trail-blazers, for our organization is yet new, and we are indeed grateful to the dentists who have worked with us and encouraged us in the State and National Associations.

When given this subject, the writer was humorously inclined to change it to *What an Assistant Expects of the Dentist*. We want his interest and co-operation in this movement to make us a higher and more respected class of workers.

There are a few outstanding elements which, if injected into our minds and souls, will help us more perhaps than anything else that might be said.

\*Read before the Indiana State Association of Dental Assistants, May, 1925.

(1) *Loyalty.* This brings to mind a quotation from Elbert Hubbard: "If you work for a man, in Heaven's name *work* for him. An ounce of loyalty is worth of pound of cleverness." Those of us who can't successfully solder bridges should ponder over this.

(2) *Cleanliness.* If ever that particular element were "next to godliness," it surely is in a dental office. Here it is as essential to know and respect the occasional use of a mop and broom as it is to be able to hand the doctor the hemostatic forceps when he asks for them.

(3) *Vigilance.* It is so necessary to be there every day in order to know what happened the day before.

(4) *Patience.* Old Job himself needed no more than we do at times. Dentists are highly nervous, peculiarly temperamental individuals and are, as you will have to agree, a bit trying at times. Then, too, there is Mrs. A. or Mrs. J. who has been in the office just ninety-nine times to have her plate adjusted "just a little bit on the right side above"—you know the story and you have grown almost sick of the sight of the feathers on her hat, yet you must assume an air of interest and gladness at having her appear at the same hour when three others are impatiently waiting outside the portals.

(5) *Tact and Affability.* These attributes are so closely akin to patience! Make the people with whom you come in daily contact glad to see you and talk with you. A smile in the voice in a dental office is a real asset.

Now I haven't mentioned in minute detail—it is well nigh impossible to do so—the innumerable duties that a wide-awake assistant is expected to perform, but if you *are* wide-awake, you need not be told what they are. Just keep in mind the above-mentioned qualities. Having acquired these precious gifts, the rest will quickly come and your efforts will be recognized and appreciated even though you are not looking for that.

500 Hume Mansur Building.



## EXTRACTIONS

No Literature can have a long continuance if not diversified with humor—ADDISON

Another good thing for the complexion is to put it to bed before 2 a. m.

(Salesman—demonstrating car)—Now I will throw in the clutch.

(Farmer)—I'll take her then. I knew if I held off long enough you'd give me something for nothing, b'gosh!

The best argument yet advanced in favor of religion is the Soviet's contempt for it.

(Diogenes)—And what were you in the war, my friend?

(Old Soldier)—A private, sir. And Diogenes blew out his lamp and went home.

A man is a person who can buy a hat without asking anybody's permission.

(Bill)—What's that girl doing with a tobacco pouch?

(Dan)—Tobacco pouch nothing! That's what she carries her bathing suit in.

A man we know put this sign on the back of his car:

IF YOU CAN READ THIS  
YOU ARE TOO DAMN CLOSE!

A youth seated himself in a dentist's chair. He wore a wonderful shirt of striped silk and an even more wonderful checked suit. His shoes were a loud tan and he wore a bright red tie. He had the vacant stare that goes with these. "I'm afraid to give him gas," the dentist said to his assistant. "Why?" asked the assistant who was attending them. "Well," said the dentist, "how will I know when he is unconscious?"

A young matron, shopping, asked a butcher the price of hamburger steak.

"Twenty-five cents a pound," he replied.

"But at the corner store it is only twelve cents," said the customer.

"Vell, vhy didn't you buy it there?"

"Because they haven't any."

"Oh, I see," said the butcher. "Ven I don't have it I sell it for ten cents a pound."

Bricklaying never causes high blood pressure unless you happen to be paying for the job.

"Mother," cried little Mary, as she rushed into the farmhouse they were visiting, "Johnny wants the Listerine. He's just caught the cutest little black and white animal, and he thinks it's got halitosis."

(Street Fakir)—What's the trouble, Bill?

(Second Ditto)—Here I worked half a day paintin' up a sparrow into a red-headed Belgian canary, an' I'm blowed if the guy I sold it to didn't gimme a phony dollar bill.

(Angus)—You're lookin' bad, Wullie.

(Wullie)—Aye, I've been in the hospital an' the doctors have taken awa' ma appendix.

(Angus)—These doctors'll tak' onything. It's a peety ye didna have it in yer wife's name.

One day a man walked into a fur store and said: "I want to get a set of furs like the black ones in the window."

"Oh, you mean skunk?" said the salesman.

(Note)—May his bones rest in peace.

(Lord Blessus)—I'm bally well sorry, old chap, to hear of your trouble with that American heiress. How did you fall out with her?

(Duke of Wiz)—I didn't fall out—I was thrown out.

The stuff he bought  
Contained carbolic—  
Now with the angels  
He doth frolic!

Two Irishmen watching parade.

"Who are those fellows, Mike?"

"They're Shriners."

"And what are Shriners?"

"Why, they're Masons."

"Sure, and what the devil do they want now? They're getting \$18.00 a day."

A salesman asked a Scotch farmer to buy a bicycle. "They are cheap now and I can let you have a good one for seven pounds."

"I would rather put the money in another cow," said the farmer, reflecting. "You would look mighty foolish riding around your farm on a cow, now wouldn't you?" said the salesman.

Said the Scot: "No more foolish than I would milking a bicycle."

## DIETETICS and HEALTH

### The Law of Life and the 16 Elements

The Law of Life is replenishment; we must put back day by day into the blood stream what the life-cells take from it in the process we call living. *Only through the food we eat* combined with air and water can this be accomplished.

#### THE 16 ELEMENTS

Iron	Phosphorus
Sodium	Lime
Iodine	Magnesium
Oxygen	Potassium
Hydrogen	Sulphur
Fluorine	Carbon
Chlorine	Nitrogen
Silicon	Manganese

There is no creature alive today on the face of this planet whose body does not contain these sixteen substances, says Alfred W. McCann. The body obtains them for its needs through the medium of food, and through food alone.

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### The Future of Man

Elliot Smith, the anatomist and anthropologist, declares that there is no evidence of any essential modification of human structure, apart from such changes as result from the intermingling of races, within the last fifty centuries. The jaws had already assumed their modern form long before the artificialities of civilized diet were devised; the little toe had begun to atrophy many centuries before boots were invented. The study of fossil man shows a steady progress in the early stages of the history of the human family, but its accomplishment took a vast span of time. The progress effected during the last fifty centuries has been due, not so much to the improvement of structure or



an enhancement of man's mental aptitude, as to the accumulation of knowledge and elimination of error. Undue stress has been laid on the use of the hand as the chief element in effecting man's intellectual progress. Only when higher powers of vision were acquired was the brain able to direct the hands in acquiring the skill and the ability of experimenting, out of which knowledge of the external world and the forces acting in it gradually emerged. We must, of course, assume that the human brain is still evolving; but the process is so slow that no change is recognizable from the time of neolithic man in western Europe.

The main element in human progress is, and will always be, the accumulation of knowledge. The most important racial changes that are taking place in mankind at present are due to the wholesale intermixture of peoples of different races and diverse traditions on a much greater scale than the world has ever known before. From such admixtures, new types will arise—the process can be seen in operation in the Hawaiian Islands and elsewhere—and certain native races will disappear. But, apart from the profound effects on physique that such intermingling will produce, the improvement in the health of mankind which a fuller understanding of hygiene has brought about is having a marked effect on man's physical and mental fitness.

The popular idea that the man of the future will be a big-brained monstrosity with a feeble body is not justified. We protect the small-brained part of the population and promote the cultivation of a physique that has never been surpassed in the history of mankind. The conditions of modern civilization make it difficult to generalize as to the means by which the human stock can be improved, in view of the fact that real geniuses often come from the most unlikely ancestry and under conditions which one might imagine would be absolutely fatal to any hope of intellectual development. However much the conditions of the industrial city worker may affect the individual, Elliot Smith does not think that the ill effects will influence physique in general. Mankind will improve in physique, he thinks. It will certainly be riper in experience, wiser and better equipped in every way to control its destiny than it is today, since man is already a being capable of modifying his behavior to suit alterations in his environment. The future of mankind is, he considers, a promising one.—*Journal A. M. A.*



## FUTURE EVENTS

The Seventh Annual Meeting of the AMERICAN SOCIETY OF ORAL SURGEONS AND EXODONTISTS will be held at the Brown Hotel in Louisville, Kentucky, on September 18 and 19, 1925, the Friday and Saturday preceding the meeting of the American Dental Association.

EARLE H. THOMAS, *Secretary*,  
30 North Michigan Avenue, Chicago.

The annual meeting of the NATIONAL ALUMNI CHAPTER OF PSI OMEGA FRATERNITY will be held at the Kentucky Hotel, Louisville, Kentucky, Monday, September 21, 1925. An executive session will be held at 10 A. M., and general session and initiation at 2 P. M.

The annual banquet for members and their ladies will be given at the Kentucky Hotel at 6:30 P. M. All members are requested to register at Headquarters upon arrival.

HAROLD S. SMITH, *Grand Master*,  
1010 Belmont Ave., Chicago, Ill.

M. J. COUCH, *Secretary*,  
3801 Broadway, Chicago, Ill.

The AMERICAN DENTAL ASSISTANTS ASSOCIATION will hold its first annual session, September 21-25, 1925, at Louisville, Ky.

Headquarters will be in the Green Room, Hotel Seelbach. Registration will start at ten o'clock on Monday, September 21st, and will continue during the succeeding days of the meeting. The first meeting of the House of Delegates will be held on Tuesday, September 22nd, at ten o'clock. The first general session will be held at two o'clock, Tuesday, September 22nd. Clinics for dental assistants will be given on Wednesday, September 23rd. There will be a dental assistants' luncheon on Thursday, September 24th. Clinics will be given before the American Dental Association, probably on Friday, September 25th.

Other interesting sessions will be announced later. All dental assistants and members of the dental profession are cordially invited to attend these meetings.

The annual meeting of the NATIONAL ASSOCIATION OF INDUSTRIAL DENTAL SURGEONS will be held at Brown Hotel, Louisville, Kentucky, Wednesday, September 23, 1925.

THE MASSACHUSETTS BOARD OF DENTAL EXAMINERS will hold an examination for registration for both dentists and oral hygienists in Boston, Mass., October 7-10, 1925. Full information, application blanks, etc., may be obtained at the office of the Secretary, Room 146, State House, Boston. All applications

must be filed at the office of the Secretary at least ten days before date set for said examination.

JOSEPH N. CARRIERE, *Secretary.*

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The SUSQUEHANNA DENTAL ASSOCIATION will hold its annual meeting in St. Stephen's Parish House, Wilkes-Barre, Pennsylvania, October 19-21, 1925. Study course—no exhibits.

FULLER L. DAVENPORT, *Chairman, Executive Committee,*  
524 Miners Bank Bldg., Wilkes-Barre, Pa.

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THE INDIANA STATE BOARD OF DENTAL EXAMINERS will hold its next examination at the State House, Indianapolis, commencing November 9, 1925.

It is of the utmost importance that applicants confer early with the Secretary for information relative to examination, as applications properly signed, photograph and all other credentials must be in the hands of the Secretary-Treasurer without fail at least five days before examination.

For information and application address

J. M. HALE, *Secretary-Treasurer,*  
Mt. Vernon, Indiana.

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THE NEW JERSEY STATE BOARD OF REGISTRATION AND EXAMINATION IN DENTISTRY will hold its regular examinations at Trenton, N. J., commencing Monday, December 7, 1925, and continuing for five (5) days thereafter. License fee, \$25.00; re-examination fee, \$10.00.

Practical tests required: Insertion of an approximal gold filling with the approximating tooth in position, compound approximal amalgam filling and a silicate filling; candidate must furnish his own patient. Taking of impressions, bite, selection of teeth, articulation, trial plate; candidate must furnish his own patient. Practical examination in mouth diagnosis.

Attention is directed to the following quotation from the dental law of New Jersey: "Applicant shall present to said board a certificate from the Commissioner of Education of this State, showing that before entering a dental college he or she had obtained an academic education consisting of a four-year course of study in an approved high school or the equivalent thereof."

In accordance with this law the secretary will issue application blanks only upon presentation of the required certificate from the Commissioner of Education, State House, Trenton, N. J.

Candidates are to be given the privilege of appearing at four examinations during a period of three years. Upon failure to be eligible for a license after four examinations they shall be required to take the entire examination over, and upon further failure to secure a license after four more examinations during a period of three years they shall be ineligible for further examination.

Application must be filed, complete, ten days before the date of the examinations. Address all communications for further particulars to

JOHN C. FORSYTH, *Secretary,*  
148 West State Street, Trenton, N. J.

The midwinter clinic and meeting of the CHICAGO DENTAL SOCIETY will be held at the Drake, January 27, 28 and 29, 1926.

A splendid program is in preparation which will surpass any of the previous efforts of the Society. All members of the American Dental Association are cordially invited and are most welcome. Information may be secured from any of the following chairmen:

Otto U. King, 58 East Washington Street, Program Committee

O. J. Olafsson, 1307 North California Avenue, Clinic Committee

James W. Ford, 25 East Washington Street, Exhibit Committee

Hotel reservations should be made direct with the particular hostelry you prefer.  
For general information address

HUGO G. FISHER, *Secretary*,  
25 East Washington Street, Chicago, Ill.

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THE DENTAL SOCIETY OF THE STATE OF NEW YORK will hold its fifty-eighth annual meeting at the Hotel Astor, New York City, May 19-22, 1926. All literary exercises, clinics and exhibits will be staged at the Hotel Astor.

The Society extends a cordial welcome to all ethical dentists.

Exhibitors are requested to address Dr. H. C. Bennett, Chairman of the Exhibit Committee, 576 Fifth Avenue, New York City, for information and space.

Educational Courses will be conducted on Monday, Tuesday and Wednesday, May 17, 18 and 19. Address Dr. Edward Kennedy, Chairman of Educational Courses, 347 Fifth Avenue, New York City, for information and enrolment.

Make reservations early.

A. P. BURKHART, *Secretary*,  
57 East Genesee Street, Auburn, N. Y.

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THE FIRST INTERNATIONAL ORTHODONTIC CONGRESS will be held in New York City, August 16-22, 1926.

W. C. FISHER, *President-General*,  
501 Fifth Avenue, New York City.

WALTER H. ELLIS, *Secretary-General*,  
397 Delaware Avenue, Buffalo, N. Y.

